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Ancient Greek Ideas on Speech, Language, and Civilization

DEBORAH LEVINE GERA

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*In Memory of my Teacher
Abraham Wasserstein*



PREFACE

THIS book is about Greek ideas on language, its beginnings and role within society. The source and nature of earliest speech and civilization are puzzles which have intrigued philosophers, scientists, and ordinary people for many centuries. Great advances have been made in recent years in the study of early humans and their language, utilizing finds in the fields of palaeontology, archaeology, neurology, physiology, and linguistics, but many questions relating to the beginnings of humankind remain unsolved. Indeed, by the very nature of things, all attempts to describe earliest human language and society must remain hypothetical and conjectural. The Greeks, of course, could do little besides speculate and my book is a survey of Greek attitudes, assumptions, conjectures, and theories on the beginnings of language and the links between speech and civilization. (The work is not, I should stress, an account of the development of the Greek language nor is it a study of linguistic and grammatical investigations undertaken in the ancient world.) I look at Greek ideas about the nature of the world's first society and first language, the source of language, the development of civilization and speech, and the relation between people's level of civilization and the kind of language they use. I also discuss some early 'linguists' found in literary texts, figures who investigate or learn about language and related issues.

Much of Greek thinking about questions of language and society is presented only incidentally and relevant passages are scattered in a wide range of classical sources. Two of the book's chapters are based on close readings of passages in Homer and Herodotus, while the remaining chapters are broader surveys which use a variety of Greek literary texts, along with pertinent Latin sources.

In an attempt to set Greek assumptions and ideas in a wider perspective, I have looked, in places, at later Western reflections on the origin and development of language and society, particularly during the Enlightenment. At times, these later writings enable us to read backwards, so to speak, and tease out the implications of the Greek texts. Elsewhere, I note the vast influence that Greek

investigations into language have had on later thinkers. I also cite, occasionally, recent research on glottogenesis, the acquisition of language, and the development of civilization in order to measure the distance between Greek views and modern ideas on these topics. At the same time, my chief purpose is to study the linguistic and anthropological interests of the Greeks in their own terms, and my intention is not to assess or grade their ideas on some scale of philosophical or scientific progress.

The first chapter, 'Polyphemus the Linguist', serves as an introduction to the book as a whole. It is an analysis of the encounter between Odysseus and the Cyclops Polyphemus in Book 9 of the *Odyssey*, in terms of the pair's linguistic capabilities. The discussion of this episode points to several recurring themes in the book: the opposing views of society as either deteriorating from a golden age of long ago or progressing from primitive beginnings, the importance of society and technical skills for linguistic development, the relation between language and diet, speech as a unique human capacity, and the meaning of names. I try to show that many implicit assumptions about language and civilization held by the Greeks are already found in this passage of Homer.

The chapter 'Language in the Golden Age' discusses the nature of speech in the primeval, idyllic era of Kronos. The golden age world is a harmonious one, with gods, animals, and men all speaking the same language. Speech was present from the outset, freely granted to all, in much the same way as the earth spontaneously produced food for all living things. This original, universal language may have been ideal in other ways as well and I look at some later discussions of perfect, Adamic languages, as well as seventeenth-century attempts to create a universal tongue. Further topics are primitive languages used to express emotions, the language of the gods, and the speech of animals. This chapter also touches upon some famous glottogenetic theories of the eighteenth century.

'Psammetichus' Children', the next chapter, is a detailed analysis of Herodotus' famous tale of an experiment performed by the Egyptian king Psammetichus in order to determine the world's earliest language. I compare the king's assumptions and 'scientific' method to modern-day ideas on children's acquisition of language. Psammetichus' experiment was enormously influential over the centuries and I look at its effect on later thinkers, particularly in

the eighteenth century, who, in the wake of Herodotus, devised scenarios involving two children learning to speak the world's first language.

The fourth chapter, 'The Invention of Language', surveys a wide range of texts which tell of humans' ascent to civilized life and their acquisition of language as part of the process. In these progress narratives, speech was seen either as a gift from the gods, the brainchild of a single inventor, or the product of a joint effort by a society of men. A study of these inventors is followed by a close look at some detailed accounts of the various stages of language development. I also investigate the place assigned language within the overall development of civilization, and the parallels between the invention of language and the discovery of other arts, in particular fire.

In the final chapter, 'Between Language and Speech', I look at a series of exotic creatures and peoples whose limited linguistic capacities point to the distinction between language, speech, and communication. None of these barking savages, silent philosophers, weaving women, and talking parrots possess a full-fledged verbal language and the restricted forms of communication used by these figures serve to define the limits and contours of speech. The language of these marginal creatures is also closely related to their level of civilization or place in society. Later European thinkers will study such exotic figures to draw conclusions about the earliest form of language: I look at the way Greek writers present these phenomena.

A considerable part of this book deals with Greek ideas on the source and nature of the world's first language. Almost every book on the origin of language notes that the founding statutes of the Linguistic Society of Paris of 1866 included a ban on papers discussing the origin of language or the invention of a universal language. Several of these books also include the words written in 1893 by the American linguist William Dwight Whitney on the pointlessness of investigating the origin of language. 'The greater part of what is said and written upon it is mere windy talk, the assertion of subjective views which commend themselves to no mind save the one that produces them, and which are apt to be offered with a confidence, and defended with a tenacity, that is in inverse ratio to their acceptableness.' Whitney's warning has accompanied me over the past few years, throughout the writing of this book. While I have not written on the origin of language, but rather on Greek ideas on

the subject, I am well aware that I have included a great deal of speculation on what the Greeks *may* have thought or intended in their rather brief and elliptical remarks on language and civilization. I hope that at least some of the following will commend itself to minds other than my own.

It is a pleasure to acknowledge the help I have received from two friends at the Hebrew University. Joseph Geiger read the book's chapters as I wrote them and I have benefited greatly from his wide-ranging erudition and encouragement. He is still my teacher, after all these years. David Satran read a penultimate version with deceptive ease and speed, and saved me from many infelicities of content, style, and presentation. My student, Ariadne Konstantinou, cheerfully checked a great many ancient references. Three anonymous readers of the Press also provided helpful comments and criticisms.

Thanks also to my husband, Dov, and children, Avital, Chemi, and Ariel, for their civilized and loquacious society.

D.L.G.

Hebrew University of Jerusalem
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ABBREVIATIONS

<i>AJP</i>	<i>American Journal of Philology</i>
<i>ANRW</i>	<i>Aufstieg und Niedergang der Römischen Welt</i>
<i>BICS</i>	<i>Bulletin of the Institute of Classical Studies</i>
<i>CA</i>	<i>Classical Antiquity</i>
<i>CJ</i>	<i>Classical Journal</i>
<i>CP</i>	<i>Classical Philology</i>
<i>CQ</i>	<i>Classical Quarterly</i>
<i>DK</i>	H. Diels and W. Kranz, <i>Die Fragmente der Vorsokratiker</i> ⁶ (Berlin, 1951)
<i>FGrH</i>	F. Jacoby et al., <i>Die Fragmente der griechischen Historiker</i> (Leiden, 1923-)
<i>G&R</i>	<i>Greece and Rome</i>
<i>GGM</i>	K. Müller, <i>Geographi Graeci Minores</i> , i (Paris, 1861; repr. Hildesheim, 1990)
<i>GRBS</i>	<i>Greek, Roman and Byzantine Studies</i>
<i>HSCP</i>	<i>Harvard Studies in Classical Philology</i>
<i>JHI</i>	<i>Journal of the History of Ideas</i>
<i>JHS</i>	<i>Journal of Hellenic Studies</i>
<i>K.-A.</i>	R. Kassel and C. Austin, <i>Poetae Comici Graeci</i> (Berlin and New York, 1983-2001)
<i>MH</i>	<i>Museum Helveticum</i>
<i>OSAP</i>	<i>Oxford Studies in Ancient Philosophy</i>
<i>PMG</i>	D. Page, <i>Poetae Melici Graeci</i> (Oxford, 1962)
<i>QUCC</i>	<i>Quaderni urbinati di cultura classica</i>
<i>RE</i>	<i>Real-Encyclopädie der classischen Altertumswissenschaft</i> , ed. A. Fr. von Pauly, rev. G. Wissowa et al. (Stuttgart, 1894-1980)
<i>RhM</i>	<i>Rheinisches Museum für Philologie</i>
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<i>SVF</i>	H. von Arnim, <i>Stoicorum Veterum Fragmenta</i> (Stuttgart, 1903-5)
<i>TAPA</i>	<i>Transactions of the American Philological Association</i>
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Polyphemus the Linguist

I. LANGUAGES IN HOMER

In the *Odyssey* Odysseus encounters a wide variety of beings, both human and supernatural. One of the most notable means used by Homer to characterize and distinguish these diverse creatures is to note the various types of food they consume. The very different kinds of diet found in the *Odyssey* point to the wide cultural differences between various groups of men, and also emphasize the distinction between gods, men, and animals. Thus, when Calypso and Odysseus sit down to a meal together, she is served ambrosia and nectar, while he eats mortal fare. If men are normally said to be grain-eaters, we also find flower-eaters (the Lotophagoi) and people-eaters (the Cyclopes and Laestrygonians).¹ Food, then, serves as a cultural marker. Other related criteria used to delineate various kinds of societies in the *Odyssey* are the performance of sacrifice to the gods and the use of agriculture. The Polyphemus episode of the *Odyssey* (9. 105 ff.) is unique in adding yet another cultural marker, that of language, as a means of illustrating the specific features of a society. The encounter between Odysseus and the Cyclops points to a whole series of assumptions about language and speech. Indeed, although Homer does not include in his poems any direct reflections on the origin, development, or use of language, this episode of the *Odyssey* discloses several implicit ideas and assumptions about language held by the early Greeks.

Homer is aware, of course, that there are many different languages spoken by a wide variety of people. Epic heroes who travel to foreign parts are said to come in contact with men of another (or

¹ Calypso and Odysseus: *Od.* 5. 196-9; Lotophagoi: *Od.* 9. 83-4; Cyclopes: *Od.* 9. 288-93, 297, etc.; Laestrygonians: *Od.* 10. 116, 124. The classic study is that of Vidal-Naquet 1996 (orig. pub. 1970). For men as grain- or bread-eaters, see below, Sect. 3.

alien) language, ἀλλοθρόους ἀνθρώπους.² The poet also refers to the different languages spoken by the many peoples of Crete (*Od.* 19. 175) and by the various contingents of the Trojan army (*Il.* 2. 804).³ In the *Iliad* the multilingual Trojan allies who lack one common speech or tongue and speak a mixture of languages are contrasted, at times, with the Greeks, who all speak the same language.⁴ These Trojan forces are likened by Homer both to bleating lambs and clamorous cranes (*Il.* 4. 433–8; 3. 1–7) and the similes seem to be pejorative. Not only do the Trojans sound like animals—in later Greek literature the speech of incomprehensible barbarians is frequently compared to animal sounds—but the Trojan army's lack of discipline seems linked to its lack of a single, common language. The monoglot Achaeans, on the other hand, are notably calm, silent, and orderly, so that these two passages from the *Iliad* perhaps hint at a Babel-like view that a multitude of languages leads to general disorder and disunity.⁵ Elsewhere in Homer, the Carians are said to be 'of foreign (or barbarian) speech' (βαρβαροφώνων *Il.* 2. 867), while the Sintians are 'wild-spoken' (Σίντιας ἀγριοφώνους *Od.* 8. 294). Even if Homer uses the term *allothroos*, speaker of a different language, in neutral fashion, with no intention of erecting either a cultural or conceptual barrier between such people and Greek speakers,⁶ the two epithets *barbarophonos* and *agriophonos* seem less innocuous. These words may point to an attitude found in later Greek writings, according to which the non-Greek languages spoken by foreigners are thought to characterize their (inferior) culture. While the use of the word *barbaros* here may well be onomatopoeic, reflecting the babbling sound of foreign speech, *agrios* is a negative or judgemental term, which refers to life style as much as language.⁷ It is significant that both of these compound adjectives

² *Od.* 1. 183; 3. 302; 14. 43; compare 15. 453.

³ The many peoples of Homeric Crete speak both Greek dialects and non-Greek languages; see Rutherford 1992, 157–60 and Russo 1992, 83–5 on *Od.* 19. 172–9 for further discussion and bibliography. The actual Trojans may have spoken a variety of Luwian—see Watkins 1995, 51 and 144–51—while the language of the Achaeans was Mycenaean Greek.

⁴ οὐ γὰρ πάντων ἦεν ὁμῶς θρόος οὐδ' ἴα γῆρυσ ἀλλὰ γλῶσσ' ἐμέμικτο (*Il.* 4. 437–8).

⁵ See Kirk (1985, 265) ad *Il.* 3. 8–9 and compare Hall 1989, 30. Compare Polybius 1. 67. 3–11 on the multilingual chaos of Carthaginian mercenaries and see Rawson 1984, 1170–1.

⁶ Thus Hall 1989, 12–13.

⁷ Strabo (14. 2. 28) takes βαρβαροφῶναι to refer to Greeks who spoke harshly, with indistinct enunciation, rather than speakers of a foreign language.

make use of the word φωνή—rather than αὐδή—to describe foreign speech, for in Homer the word *phone* is used of sound or noise, while *aude* refers to comprehensible speech.⁸

Clearly, then, the poet recognizes that there is a wide variety of languages spoken by different peoples. Despite this awareness, it is very rare to find in Homer two interlocutors who are unable to communicate with one another. There is not even a hint in either the *Iliad* or the *Odyssey* that the Trojans and the Greeks, or Menelaus and the Egyptians, cannot address one another directly and must resort to interpreters.⁹ It is not only men of different races who are able to speak to one another without encumbrance in epic poetry: the gods too have frequent exchanges with men. Homer occasionally hints at a special language of the gods, mentioning the names used by the gods for various people, places, etc. as alternative appellations to those used by men, but this does not prevent the poet from recording straightforward conversations between mortals and immortals.¹⁰ So too Homer normally uses a separate vocabulary to distinguish between articulate human speech and animal sounds,¹¹ but when animals actually do speak, as in the case of Achilles' immortal horses, their style of expression is no different from that of other epic interlocutors (and their audience has no difficulty in understanding them). All of the speakers in the *Iliad* and the *Odyssey*, be they gods, men, or animals, simply converse with one another in the language of traditional epic and there are no linguistic barriers of any kind.¹² Speech is of crucial importance in Homer's world, as Aeneas notes:

⁸ 'Even if they are intelligible to each other, to the Greek ear their speech is mere phonic "babbling,"' Ford 1992, 177. For φωνή as a non-human voice or sound, see e.g. *Il.* 18. 219; *Od.* 10. 239; for αὐδή as human speech see e.g. *Il.* 19. 407; *Od.* 5. 334; 6. 125 and the further references in Clay 1974. Ford (1992, 172–9) has a further discussion of the exact meaning of αὐδή, φωνή, ὄσα, ὄρα, etc. in Homer; see too Leclerc 1993, 41–8, esp. 45 n. 111 on the use of these terms in Hesiod (and Homer).

⁹ See below, Sect. 3, on the difficulties in communication between Achilles and Hector.

¹⁰ For the language of the gods, see below, Sect. 2.3.

¹¹ See Ford 1992, 174–9.

¹² Of course, on a certain level, Homer, composing in the Greek of traditional epic, has no choice but to have his interlocutors speak the same language. Even if he were, for example, familiar with Egyptian or the language of the gods, he could scarcely reproduce it for his (uncomprehending) audience 'and only pedantry would protest at this convention', Rutherford 1992, 158 (ad *Od.* 19. 175). Dio Chrysostom (11. 22–3) is, in fact, just such a pedant: he attacks Homer for pretending that he understands the language of the gods. My point is that Homer nowhere raises the issue of translating from different languages. See too Pelliccia 1995, 79–80 with n. 132.

The tongue of mortal men is a pliant thing, it has in it many diverse utterances, the field of words is vast in this direction and that. (*Iliad* 20. 248-9)

And so, in their famous encounter in the *Odyssey*, Odysseus and the Cyclops Polyphemus are able to speak to one another freely, despite their very different backgrounds, and there is no need for any intermediaries or interpreters. And yet the two are not equals in language. The Cyclops is no match for the Greek's verbal sophistication, for he quickly falls prey to Odysseus' Outis (*Oûtis*/οὐ τις) ploy and accepts 'Nobody' as the Greek leader's real name (*Od.* 9. 366-9). When he is subsequently blinded by Odysseus, Polyphemus is then unable to explain to his neighbours how Nobody has wounded and deceived him: language fails him completely (*Od.* 9. 403-12). Although Polyphemus is unable to see through the Greek's linguistic trickery or make his fellow Cyclopes comprehend his plight, he does know how to communicate with his animals, both verbally and non-verbally. The Cyclops engages in conversation with his favourite ram, addressing him with great familiarity, and bemoaning the fact that the ram is not capable of responding in kind (9. 446-60). He also whistles when shepherding his flocks as he leads them to graze (9. 315), a most effective form of vocal communication.¹³ Polyphemus, then, has peculiar linguistic skills—he is limited in his ability to communicate with men, and yet at the same time attempts to converse with animals—and these capacities are directly related to the particular features of the Cyclopes' society.

2. THE CYCLOPES' SOCIETY

The Cyclopes have very primitive social arrangements and are often cited by later Greek writers as examples of barely civilized creatures, who illustrate the rude beginnings of human society.¹⁴ They do not know how to build ships and consequently are unable to make contact with other lands and peoples (*Od.* 9. 125-9).¹⁵ In fact, Polyphemus and the other Cyclopes lack most skills—they

¹³ For actual, modern-day whistled speech used by several Central and South American tribes, see Crystal 1997, 404. Lateiner 1995, 171-5, esp. 172 n. 8 analyses Polyphemus' non-verbal behaviour and use of paralinguistics.

¹⁴ See e.g. Pl. *Law* 680b-d; Arist. *Pol.* 1252^b22-3 (with Schütrumpf 1991 ad loc.); compare Strabo 13. 1. 25.

¹⁵ Compare Thalmann 1992, 81 on the relation between ships and culture.

do not work the land, cook, or build—and they live in caves, not houses.¹⁶ Polyphemus uses fire for light and warmth (*Od.* 9. 234, 251), but not for cooking or for sharpening weapons, as Odysseus does (9. 231, 327-8). The Cyclopes do not hold assemblies for making communal decisions nor do they possess any established rules of conduct (τοῖσιν δ' οὐτ' ἀγοραὶ βουλευφόροι οὔτε θέμιστες 9. 112). They neither concern themselves with one another (9. 115) nor with Zeus and the other gods (9. 275-6). Each family is a unit, 'a law' unto itself (θεμιστεύει δὲ ἕκαστος παῖδων ἥδ' ἀλόχων 9. 114-15) in the lawless world of the Cyclopes.¹⁷

These asocial creatures also possess the very minimum of linguistic competence and are unable to use speech effectively in order to transmit crucial information. Polyphemus' futile attempt to communicate his distress to his neighbours vividly demonstrates how little the Cyclopes know how to speak with one another.¹⁸ When the giant, wounded by Odysseus and his men, cries out in pain, his neighbours from the surrounding caves appear, each from his own cave (ἐφοίτων ἄλλοθεν ἄλλος 9. 401). These fellow Cyclopes, gathering in a group round his cave, are at first sight quite neighbourly: they address Polyphemus by name (9. 403—this is the first mention of the Cyclops' name in the episode) and know that he is the son of Poseidon (9. 412). But they are not genuinely involved or concerned for their neighbour, for they address the wounded Polyphemus from outside his cave, while the Cyclops suffers within. Had they actually attempted to come closer and help, the Cyclopes would have comprehended the truth of Polyphemus' statement that Nobody had harmed him, by trickery and not by force (*Oûtis* με κτείνει δόλῳ οὐδὲ βίῃφιν *Od.* 9. 408). Instead, the indifferent Cyclopes, who may have come simply because Polyphemus' cries disturbed their sleep (9. 404), keep their distance and understand that no one is harming him, either by trickery or by force (*Od.* 9. 406, 410).¹⁹ They depart, leaving the solitary and misunderstood Polyphemus to suffer by himself. It is precisely the Cyclopes'

¹⁶ No tilling of soil: 9. 107-11; no cooking: 9. 297; no ship carpenters: 9. 126-7; caves: 9. 113-14. Polyphemus does have a dairy farm of sorts: 9. 244-9.

¹⁷ Heubeck (1989, 21, ad *Od.* 9. 114): 'The irony is intentional: the Cyclopes do not recognize any θέμιστες'; compare 9. 106 *Κυκλώπων ... ὑπερφύλων ἀθεμισίων*.

¹⁸ Compare Euripides' Cyclopes: ἀκούει δ' οὐδὲν οὐδὲ οὐδένος (Eur. *Cyc.* 120).

¹⁹ See Schein 1970 for an analysis of the pun here and compare Austin 1975, 146: 'Anyone with the slightest communal sense would have investigated further to discover the true cause of Polyphemus' pain.'

indifference, their weak social bonds, which allow Odysseus' linguistic trickery to work.

Both the language skills of the Cyclopes and their social organization are undeveloped and there is, it seems, a direct link between these two factors: the Cyclopes' elementary social arrangements, their lack of a community, laws, and assemblies, is reflected in their linguistic abilities. In later Greek anthropological accounts of the development of civilization, the evolution of language and society go hand in hand. Sometimes language is said to have been acquired before the formation of a social community (e.g. Isocrates, *Nicocles* 6) and sometimes the development of speech goes together with, or even follows upon, the formation of a community (e.g. Soph. *Antigone* 355), but the two are, almost invariably, closely linked.²⁰ Homer's depiction of the Cyclopes already points to the strong nexus between community or social skills and language, for these primitive creatures barely possess the rudiments of either.

The Cyclopes are not a cohesive group, but Polyphemos is a particularly solitary figure. He lives alone, without a family, in a cave close to the sea and keeps apart from the other Cyclopes, tending his flocks by himself (*Od.* 9. 182, 187–92; compare 410). Even by the standards of his society, he is an especially remote and asocial being—Aristotle will compare the solitary Polyphemos to a lone piece on a game board²¹—and consequently both his linguistic and his social skills are particularly weak. From the very start, Polyphemos is a notoriously poor host to Odysseus and his men, and he repeatedly violates the rules of Homeric hospitality.²² His very first words to Odysseus and his men (*Od.* 9. 251 ff.), uttered in a frightening, deep, and distinctive voice (*φθόγγον . . . βαρύν* 9. 257)²³ are formulaic, but inappropriately timed, for he inquires after his visitors' identity even before he has offered them hospitality. Nestor, an exemplary host, addresses the identical question to his guests, Athena-Mentor and Telemachus, only after they have eaten

²⁰ See below, Ch. 4.

²¹ *ἀντὶ περ ἄλυσεν ὡς ὅμοιον ἐν περροῖς* (*Pol.* 1253⁶–7); see Kurke 1999, esp. 259–60. Clay 1983, 126 notes that Eustathius (*Σ Od.* 9. 189) calls Polyphemos more lawless than the lawless *ἀθεμίστων ἀδελφιστότερος*.

²² Reece 1993, 123–43 is perhaps the fullest discussion of the Cyclops episode as the reverse or parody of a *xeinia* or hospitality scene; he surveys both the conventional elements and the variations found in this episode.

²³ See Ford 1992, 176–7 for *φθόγγος* as meaning the distinctive voice of an individual in Homer.

(*Od.* 3. 69–74).²⁴ The Cyclopes' subsequent outstanding perversion of the conventions of *xeinia* is, of course, the fact that he eats his guests rather than feeding them.

It is particularly interesting to see how Polyphemos behaves under the effect of the wine provided by Odysseus. The Cyclops is already acquainted with the fruit of the vine (9. 357–8), but is unable to deal with the Greek's superior wine and becomes intoxicated.²⁵ After drinking the wine, Polyphemos seemingly adheres to the conventional duties of a host, for he wishes to give Odysseus a *ξείνιον*, a guest gift in return, and consequently asks the Greek his name (9. 356).²⁶ When the Cyclops asks Odysseus for his name, he does so in exceptionally brief and blunt fashion. He does not use the standard formula—*τίς πόθεν εἰς ἀνδρῶν; πόθι τοι πόλις ἡδὲ τοκῆς*—that is, he does not inquire after the Greek's geographical origin and parentage in addition to his name,²⁷ but simply requests 'tell me your name now' (*καὶ μοι τεὸν οὖνομα εἰπέ αὐτίκα νῦν Od.* 9. 355–6). With this abrupt question the isolated, asocial Cyclops does more than betray uncivilized manners. Polyphemos does not realize that people are normally identified within a social context and that a mere name, with no mention of family and ethnic origin, is not enough to establish a person's identity.²⁸ He is barely cognizant of the notion of belonging to a wider community—a family, an ethnic group, a country. When Odysseus replies that his name is Nobody, he pointedly mentions the broader social context, stating that his mother, father, and all the rest of his friends call him Nobody (*Od.* 9. 366–7). The wily Odysseus has a name, a community of family and friends,²⁹ as well as linguistic skills which are far beyond that of his host, while Polyphemos' ignorance of social groupings is matched by his linguistic incompetence.

²⁴ See Webber 1989, esp. 4 and 8.

²⁵ The wine which Odysseus offered the Cyclops was probably unmixed—see 9. 204–5.

²⁶ See Clay 1983, 119: 'The Cyclops follows Homeric etiquette only when drunk—only to pervert it by offering as his gift to eat Odysseus last.' Podlecki 1961 discusses the relation between guest gifts and naming.

²⁷ See *Od.* 1. 170; 10. 325; 14. 187; 15. 264; 19. 105; 24. 298 and see Webber 1989, 4.

²⁸ See Webber 1989, 11 and Peradotto 1990, esp. 94–9. 128–9. 154–5. 162–3. Later, when cursing Odysseus, Polyphemos is careful to repeat all of the Greek's marks of identity—see below.

²⁹ Not only an imaginary community which makes use of his fictitious name—see Odysseus' real community of companions when he convenes an *agora* before coming to the Cyclopes' land (*Od.* 9. 171–6); see Clay 1983, 117.

3. LANGUAGE, DIET, AND LAWS

Odysseus' stratagem of using an unlikely alias succeeds because Polyphemus has such a poor command of language. It is Alcinous, king of the refined and highly civilized Phaeacians, the very obverse, as it were, of the primitive Polyphemus, who notes that everyone has a name. The sophisticated and cultured Alcinous understands communities and languages. 'There is no one, bad or good, base or noble, without a name. Parents give their children names from birth' (*Od.* 8. 552-4), the king states categorically. Indeed, we have seen that even the solitary Polyphemus has a name which is used by his fellow Cyclopes (9. 403).³⁰ But not all names are possible or intrinsically likely and not everyone learns to use language well. The backward Polyphemus does not recognize when a name, perhaps the most basic element of language, is patently false. Thus, when Odysseus identifies himself as 'Nobody', the Cyclops is unable to perceive that his wily opponent has responded with an impossible, incredible name, one which violates the normal conventions of language.³¹ Odysseus' use of the name Nobody (*Οὔτις/οὐ τις/μή τις/μήτις*) is doubly clever, a dual pun which both causes Polyphemus to fall into the trap of complaining unintelligibly that Nobody is harming him, and also allows the Greek to celebrate his own cunning and intelligence, his *metis* (*μήτις*; compare *Od.* 9. 414 *ὡς ὄνομ' ἐξαπάτησεν ἑμὸν καὶ μήτις ἀμύμων*).³² Both Odysseus' wine and his words are too sophisticated and too potent for the Cyclops, who can barely absorb either. Polyphemus' partial command of language is all of a piece with his asocial and semi-civilized way of life: the Greek's speech and diet are the product of a much higher level of culture.

Speech and diet are, in fact, two criteria used by Homer to describe human beings and distinguish them from beasts. Men in epic are termed eaters of bread or grain (*σίτον ἔδοντες, σιτοφάγοι,*

³⁰ Scholars offer different explanations of the name: *Πολύφημος* can mean 'much-talked about' (i.e. the notorious giant) or 'he who speaks much'. This second interpretation, 'speaking much' or 'having many utterances', may well be an ironic comment on the isolation of the uncommunicative Cyclops (Higbie 1995, 12), but it could refer to the power of Polyphemus' final utterance or curse against Odysseus. See Thalmann 1992, 88; and see below. Odysseus is, of course, granted a meaningful name by his grandfather Autolycus (*Od.* 19. 399-409).

³¹ See Austin 1975, 147 and compare the provocative act of Diodorus Cronus of Megara, who deliberately gave his slaves ridiculous names; see below, Sect. 5.4.

³² See Schein 1970, esp. 79-81.

etc.).³³ and they are also characterized as possessors of articulate speech *αὐδήεντες*.³⁴ Polyphemus the cannibal fails this test of humanity on both counts, for he neither resembles a grain-eater (compare *Od.* 9. 190-1 *οὐδὲ ἔρκει ἀνδρὶ γε σιτοφάγῳ*) nor is he articulate. In the course of his travels, Odysseus uses these two criteria of speech and diet when trying to discover the character of the local inhabitants. Twice, when landing in foreign parts, the Greek hero asks himself what eaters of grain, that is, what men, are to be found there, only to discover that they are not in fact normal bread-eating human beings, but the Lotus-eaters (*Od.* 9. 89) and the cannibalistic Laestrygonians (10. 101).³⁵ When Odysseus comes to Scheria, he wonders whether the cries of Nausicaa and her friends are those of nymphs or if he is 'in the neighbourhood of humans possessing intelligible speech' (*ἡ νύ που ἀνθρώπων εἶμι σχεδὸν αὐδήεντων Od.* 6. 125). He asks this question after speculating aloud as to whether the Phaeacians are arrogant, wild, and lawless, or hospitable and god-fearing.³⁶

This last means of categorizing unknown peoples—in terms of their laws and piety—also arises in relation to the Cyclopes, for Odysseus asks the identical question concerning their way of life, before he explores their land (9. 175-6).³⁷ In fact, the Greek specifically applies these terms to Polyphemus himself, saying that he suspected that he would encounter among the Cyclopes a great man, wild and without real knowledge of laws or ordinances.³⁸ Thus the means used to assess foreign peoples in the *Odyssey* is to examine whether they have religious and ethical laws, rather than evaluating them on the basis of the language they speak.³⁹ The question asked of unknown peoples in the *Odyssey* is not whether they possess an intelligible human tongue, but whether they speak the language of civilized intercourse. The possession of laws and regulations in relation to both gods and men—being god-fearing

³³ *Od.* 8. 222; 9. 89; compare *Il.* 21. 465. See e.g. Dierauer 1977, 12 and Baldry 1965, 12.

³⁴ See e.g. *Il.* 19. 407, 418; *Od.* 6. 125; 5. 334; 10. 136 etc. See too Clay 1974, 130-5 and Ford 1992, 177-8. Another epithet often assigned to humans in epic, *μέροτες* (*Il.* 1. 250 etc.) was wrongly understood by the ancients to mean 'articulate'—see Baldry 1965, 204 n. 6; Kirk 1985, 79-80 (ad *Il.* 1. 250).

³⁵ See Vidal-Naquet 1996, 39. ³⁶ *ἡ ῥ' οἷ' γ' ὕβρισταί τε καὶ ἀγριοὶ οὐδὲ δίκαιοι, θε φιλόφεινοι, καὶ σῶν νόος ἐόντι θεοσβήεις Od.* 6. 120-1.

³⁷ See too Odysseus' arrival at Ithaca (*Od.* 13. 201-2) and compare 8. 575-6.

³⁸ ἀγριοι, οὐτε δίκας εὐεϊδότες οὐτε θέμιους *Od.* 9. 215; see too 189 ἀθεμίους 389.

³⁹ Hall 1989, 12-13.

and law-abiding—presupposes, of course, the use of a fully-developed language.⁴⁰

Customs and laws can, in fact, be viewed as a kind of second language,⁴¹ an additional, more sophisticated layer of rules and conventions, superimposed on the underlying foundation of language. Later Greek writers ask very similar questions about the origins of both laws and language. Did they develop only after cohesive communities of men were formed or did they bring about such social organization? Was there an inventor of words or namegiver, an *onomatotheres* along the lines of a *nomothetes*, a lawgiver? Are both language and laws acquired from society at large with no need for a specialist teacher of Greek or justice? We shall return to these issues below (Sect. 4.3).

Homer does not deal with any of these questions or parallels, but there is one further common feature of justice and language which is relevant to the Polyphemus episode in the *Odyssey*, namely that animals are thought to lack both these marks of civilization. The absence of ethical rules in the world of beasts is linked, in turn, to the animals' dietary habits. In a notable passage, Hesiod points out that while Zeus has given justice to men, this is not true of animals: fish, wild beasts, and winged birds eat one another, since they have no justice (*Erga* 276–8).⁴² The lawless, cannibalistic Polyphemus is like Hesiod's animals: he has no moral qualms about eating Odysseus and his men. We have already seen that the Cyclops has no common mode of discourse with the Greek and this lack of civilized speech seems to be a third member of the triangle, together with lawlessness and cannibalism: all three are features of animals and bestial, savage people. In later Greek ethnography, we find a direct link between the savage practices of a people, their diet of raw, uncooked food, and the quality of their speech. While it is tempting to relate Polyphemus' cannibalism to his poor command of language and bare acquaintance with social practices, and to view all three qualities as interrelated phenomena found in primitive societies, Homer's Laestrygonians are a counter-example of sorts. The Laestrygonians are in many ways quite civilized. They clearly possess

⁴⁰ Compare the argument made by Xenophon's Hippias that men could not have composed the unwritten laws respected by everyone, because they do not speak a common language (*Mem.* 4. 4. 19).

⁴¹ See Havelock 1957, 29.

⁴² Renehan 1981, 254–6 has a valuable discussion of the passage. See too Detienne 1981, esp. 218–19 on the knowledge of justice as the essential distinction between mankind and animals.

technical skills, for they build smooth roads meant for wagons and have fine houses. Their society is well developed: they live in a town, greet one another companionably, hold assemblies, and are ruled by a king.⁴³ Despite all these trappings of civilization, the Laestrygonians are cannibals, cooperative man-eaters, who join together in capturing and consuming Odysseus' men (*Od.* 10. 116–24). In their case, cannibalism does not necessarily entail poor social or linguistic skills.⁴⁴

Achilles' final encounter with Hector in the *Iliad* (*Il.* 22. 248 ff.) provides another illuminating instance of the link between language, societal relations, and cannibalism. Achilles explains to Hector (22. 260–6) that they cannot be bound to one another by agreements or oaths—by the language of laws and piety—because they are virtually members of different species. The Greek and Trojan are like lions and men, or wolves and sheep, Achilles states, joined only in perpetual hostility, with no common ground or feeling (*ὁμόφρονα θυμόν* 22. 263). This lack of a common bond or mode of discourse is, it seems, what will later permit Achilles to exhibit cannibalistic feelings towards his Trojan opponent. The Greek admits that he would like to dismember Hector and eat him raw (*Il.* 22. 346–8).⁴⁵ Perhaps Achilles can express this wish precisely because he does not see Hector as belonging to the same species as himself; in that case, he would not actually be eating his own kind.⁴⁶ Or perhaps his own earlier analogy with lions, sheep, and wolves has influenced Achilles here and propelled him towards near-bestial behaviour. Since there can be no common discourse or justice in the relationship between Hector and Achilles, cannibalism is a conceivable alternative.

4. COMMUNICATING WITH ANIMALS

The very quality which the Trojan and the Greek lack—a basic sympathy or likemindedness—is the one to which the Cyclops Polyphemus aspires, not in relation to the Greeks or his fellow

⁴³ Roads: *Od.* 10. 103–4; houses: 10. 111; town: 10. 104, 108; greetings: 10. 82–3; assemblies: 10. 114; king 10. 110–11.

⁴⁴ The Laestrygonians are more, rather than less, civilized than the Cyclopes, *pace* Austin 1975, 143; see Jones 1988, 92; Thalmann 1992, 77; Clay 1983, 129.

⁴⁵ See *Il.* 4. 34–6 and 24. 212–13 for similar wishes to eat the flesh of one's enemy and see the stimulating discussion in Rawson 1984.

⁴⁶ See Rawson 1984, 1168; Konstan 1990, 211; Redfield 1994, 191–9.

Cyclopes, but with regard to his pet ram. After he is blinded and tricked by Odysseus, the Cyclops addresses his favourite animal, the finest ram of his flock (*Od.* 9. 446–60). Polyphemus turns to the ram with a term of endearment, the friendly vocative *κριέ πέπον* 'gentle ram' (9. 447). (The word 'gentle' *πέπον* is usually used in relation to human beings.) The solitary, wounded figure begins by wondering why the animal, whose habits he knows well, is the last to leave the cave, when he normally leads the flock (9. 447–52). Only then does Polyphemus turn to his own sorrows, imagining that the ram is grieving for his master's eye (9. 452–4). The ram, of course, does not answer, although the Cyclops wishes that he were capable of informing him of Odysseus' whereabouts: 'If you could only think like me and become capable of speech' (*εἰ δὴ ὁμοφρονέεις*⁴⁷ *ποτιφωνήεις τε γένοιτο εἰπεῖν* *Od.* 9. 456–7), the Cyclops wishes aloud. He would like to be closer to his animal and is sure that the ram would sympathize and cooperate with him. Polyphemus' words to his favourite animal here point to what later Greek writers will explicitly state to be two of the main purposes or uses of language—sharing feelings and communicating intentions.⁴⁸

It may even be true, as Pelliccia (1995, 103–5) suggests, that in this passage Polyphemus—that is to say Homer—sees the ability to speak as composed of two processes: the ability to formulate thoughts in the mind by means of words, the cognitive function of language (*ὁμοφρονέεις*), and the ability to express these words verbally aloud, the communicative function of speech (*ποτιφωνήεις γένοιτο εἰπεῖν*). When Circe transforms Odysseus' men into swine (*Od.* 10. 239–40), they retain the first of these two linguistic functions, their human *νοῦς*, but lose their ability to speak, because their voices have been changed into the *φωνή* of pigs. According to this interpretation animals' linguistic skills are shown, in Homer, to be doubly removed from those of man. They cannot use words to formulate thoughts, nor can they speak.

It is interesting to contrast Polyphemus' stance here with that of another vulnerable and solitary figure, Sophocles' Philoctetes. When Philoctetes finds himself in a situation similar to that of the blinded Polyphemus—he is deprived of his bow and Neoptolemus refuses to respond to his pleas for its return (*Soph. Phil.* 927 ff.)—

⁴⁷ Compare the *ὁμόφρονα θυμὸν* (*Il.* 22. 263) which Achilles and Hector do not share.

⁴⁸ See below, Sect. 2.2 and Sect. 4.3.

the Greek will turn to his harsh surroundings: the water, rocky land, and companionship of wild beasts (*ὡς ξυνουσίαι θηρῶν ὀρεῖων* 936–7). He, too, addresses animals, but he does so out of despair, and has no expectation of any real reply. Unlike the Cyclops, Philoctetes does not live in a pleasant, pastoral place with the friendly company of animals to relieve his loneliness. Indeed, the surrounding society of 'dappled or shaggy beasts' only serves to stress his isolation and misfortune (183–5). It is his beloved Greek language (*φιλιτατον φώνημα* 234) that Philoctetes wishes to hear (225–35), not the speech of animals.⁴⁹

Even though Polyphemus is indifferent towards his fellow Cyclopes and behaves as a lawless beast towards the Greeks, eating Odysseus' companions, he is nonetheless anxious to share his thoughts with his favourite animal. If his inability to communicate with the other Cyclopes (or Odysseus) points to the primitive side of Cyclopean society, Polyphemus' attempt to speak with animals has overtones of the golden age or, to be more precise, the age of Kronos, where traditionally everyone—gods, men, animals, even nature itself—spoke together.⁵⁰ 'The Cyclopes' way of life represents the very rudiments of human culture in many areas, but their world 'an extraordinary mixture of the divine and the brutish'⁵¹ is more complex, and contains traces of an idyllic golden age as well. They need not, for instance, plough or sow, but rely on the gods for their sustenance. The soil bears them wheat, barley, and vines (*Od.* 9. 107–11), just as the earth bore fruit of its own accord for men of the golden race in the time of Kronos.⁵² The primitive, cannibalistic Cyclopes are also said to enjoy a special, open relationship with the gods, as do their cultural opposites and distant relations, the refined Phaeacians (7. 205–6).⁵³ Polyphemus himself is the son of Poseidon and can summon his divine father's aid at will (*Od.* 9. 517 ff.). Thus there is a pastoral, almost paradisiacal side to the Cyclopes' world and it is in this context that we should view Polyphemus' attempt to converse with his favourite ram: it is, apparently, a throwback to the faraway practices of the golden age when animals possessed the power of speech. Polyphemus may have

⁴⁹ See Rose 1976, esp. 59–63; Segal 1981, 333–9.

⁵⁰ For the golden age, see below, Ch. 2.

⁵¹ Kirk 1970, 165; see too Thalmann 1984, 98 and 214 n. 41.

⁵² See Hes. *Erga* 117–18 and see e.g. Kirk 1970, 164.

⁵³ See Clay 1983, 125–32 on the links between the Cyclopes and the Phaeacians. The Giants are a third group who enjoy this privileged relationship with the gods.

only limited language skills, but they are sufficient to allow him to converse with animals (and whistle to them as a signal). Perhaps in the age of Kronos, all—birds, fish, beasts, and men—spoke a simpler tongue.⁵⁴

Polyphemos' mastery of language, then, points in two different directions, to two different versions of the development of human civilization. He belongs, in part, to the idyllic, golden time when everyone, animals included, spoke one language and, in part, to the primitive, pre-civilized period when men who originally had been like wild animals and possessed no language, slowly banded together and learned to communicate. The Cyclopes' world contains vestiges of a golden age of camaraderie between gods, men, and animals, and at the same time illustrates the primitive, brutish existence of men before the refinements of civilization were developed. Post-Homeric accounts of the development of civilization combine, at times, the story of a degeneration from a golden age with the idea of progress from savage beginnings and we find traces of this combination in Polyphemos' tale.⁵⁵

The Cyclops also reverses the usual attitudes towards men and animals. He is comfortable eating Odysseus and his friends, but is no good at talking to them (or even to his neighbours). At the same time, he tends his flocks carefully⁵⁶ and while he makes use of his animals for milk and cheese (9. 237–49), Homer does not tell us that he eats them, either raw or cooked. Polyphemos also exhibits a great deal of sympathy and fellow-feeling towards his flocks, to the extent of engaging in conversation with his favourite ram. Later, Odysseus will offer to Zeus what seems to be this very ram—the animal is his portion of the spoils taken from Polyphemos by the Greeks—but the god does not accept this sacrifice (*Od.* 9. 550–3). Perhaps Zeus is angered by the offering of an animal stolen from a host by his guests,⁵⁷ or perhaps it is because the ram is, in a way, a golden age ram, and such animals were not eaten or sacrificed. We shall see that

⁵⁴ Eustathius (*Σ Od.* 9. 447) describes Polyphemos' address to his ram as an instance of 'like to like' (cited by Clay 1983, 120 n. 124). A modern commentator notes that a question asked by Polyphemos (on the whereabouts of Odysseus' ship—*Od.* 9. 279–80) displays 'animal cunning'—Jones 1988, 85 (ad loc.). For the simple language of the age of Kronos, see below, Sect. 2.2.

⁵⁵ See below, Sect. 2.1 with n. 4.

⁵⁶ See Austin 1975, 143–4, on Polyphemos' *technē* within the sphere of dairy farming.

⁵⁷ Thus Reece 1993, 143.

the relationship between men and animals during the golden age implied the practice of vegetarianism: there is something distorted or wrong in the attempt to sacrifice an animal who had earlier been a partner in a conversation.⁵⁸ Odysseus' offering of Polyphemos' pet ram is somewhat similar to the illegal sacrifice of the immortal cattle of the sun, undertaken by Odysseus' men (*Od.* 12. 353 ff.). The hides of these peaceful, divine cattle continue to move after the animals are killed, and their meat, both roasted and raw, makes a noise like the lowing of cattle even after it is placed on spits. Here, too, the boundaries between friend and foe, between wild and domesticated animals were not respected, and the sacrifice goes awry: the very sound of the animals continues after they are dead.⁵⁹

Polyphemos does not live in a true golden age and many of his ways are barbaric rather than idyllic. So, for instance, while the Cyclopes have a special relationship with the gods, they are, on the whole, indifferent towards the deities (*Od.* 9. 273–8). This halfway golden age world explains, perhaps, why there is only halfway communication between Polyphemos and his ram, for the animal is incapable of responding to his master. Despite the sympathy between the pair, the ram remains mute. In the *Iliad* there are several instances of heroes addressing their horses, exhorting them to action. Achilles and Hector turn to their steeds by name (*Il.* 19. 400, 420; 8. 185) and Antilochus uses the vocative as well, terming his horses 'brave' (*φῆριστοι* 23. 409).⁶⁰ On three occasions, horses demonstrate towards their masters the kind of fellow-feeling that Polyphemos attributes to his ram: Peleus' immortal horses silently but tearfully mourn the dead Patroclus (17. 426–40; 23. 276–84) and bow their heads in sorrow for the soon-to-be-dead Achilles (19. 404–6). There is only one instance of these sympathetic horses actually speaking up. Xanthus, an immortal steed, addresses Achilles as he is about to go to battle to avenge Patroclus' death, and warns the hero of his impending death (*Il.* 19. 404–17). The immortal horse, who apparently has never previously spoken to his master, is granted a human voice by Hera (*αὐδῆντα δ' ἔθηκε θεὰ λευκώλενος Ἥρη* 19. 407). Once he has reminded Achilles of his mortality, Xanthus is then silenced by the Erinyes (*Ἐρινύες ἔσχεθον αὐδῆν* 19. 418)—either because these goddesses wish to restore the natural

⁵⁸ For the vegetarianism of the golden age, see below, Sect. 2.4.

⁵⁹ See Vidal-Naquet 1996, 44; Vernant 1980, esp. 166.

⁶⁰ Compare Menelaus' words to his horses at *Il.* 23. 442–5.

order of things or else because they are the source of Xanthus' prophetic words, which now end.⁶¹ This divine horse with his brief message is not unlike the eagle in Penelope's dream who speaks to the queen in human voice (*φωνή . . . βροτέη* *Od.* 19. 545).

Neither Xanthus nor the eagle are ordinary, mortal animals. A closer parallel to Polyphemus' relations with his pet ram is the bond between Odysseus and his dog Argus (*Od.* 17. 291–327). Polyphemus addresses his ram as they are about to be parted; Odysseus is reunited with his dog after a twenty-year separation. Both the Cyclops and Odysseus participate in one-way 'conversations' with their pets. If Polyphemus does not receive any answer from his ram, it is Odysseus' aged dog who attempts to communicate with his master, by wagging his tail and lifting up his ears, while his disguised master cannot allow himself to respond in any way. One interesting difference between the two animals is that Odysseus' dog has a name, while the Cyclops' ram does not.⁶² Perhaps Odysseus' firmer command of language leads him to leave his linguistic mark, a name, on his pet, while Polyphemus, despite his attempt to talk to his ram, again demonstrates that he is not conversant with the very basic elements of language, such as names.

And yet, in the end, Polyphemus has the last word in his encounter with Odysseus, while Odysseus names names once too often.⁶³ Odysseus taunts Polyphemus as he escapes from the Cyclopes' land, and the sound of his voice allows the giant to throw a boulder in his direction (9. 473 ff.). Although his men try to hush him, Odysseus, proud of his cunning and verbal dexterity, then speaks up again, foolishly revealing his true identity to the Cyclops. Odysseus who had first avoided identifying himself, and then given

⁶¹ For the former explanation, see Edwards 1991, 284–5 (ad *Il.* 19. 418) and for the latter, Johnston 1992, esp. 97–8. She notes two other instances of divine horses addressing their masters: a different Xanthus speaks to Castor of the Dioscuri (Alcman, *PMG* 76), and the horse Arceion may have prophesied to the warrior Adrastus in a lost epic work (see Statius, *Thebaid* 11. 442–3; Propertius 2. 34. 37–8). See too Pelliccia 1995, 105–8.

⁶² Peradotto 1990, 111–14 demonstrates how the name of Odysseus' dog *ἄργος* ('swift' or 'bright') is no mere epithet or generic appellation, but a significant name which adds both meaning and irony to the episode. Redfield 1994, 195 notes that dogs in Homer are, with the exception of Argus, anonymous, while horses can have personal names. Lonsdale 1990, 23 points out that Mycenaean tablets indicate that cows and domestic animals were given names in the Bronze Age, so that it is not unwarranted to expect Polyphemus to name his ram. See too Theocr. 1. 151; 4. 45–6; 5. 102–3 (for named sheep, cows, and goats).

⁶³ Cf. Thalmann 1992, 88.

a false, impossible appellation, now supplies his real name in full: he is Odysseus, sacker of cities, son of Laertes, who lives in Ithaca (9. 504–5; compare 259–66, 364–7). Odysseus' mention of his true name acts as a flash of illumination for the blind giant, who now comprehends an earlier prediction concerning his loss of sight. The enlightened Cyclops does not respond with stones this time, but with the force of words. Polyphemus is able, at long last, to bend language to his needs, and he carefully repeats, word for word, Odysseus' name, epithet, patronym and country of origin, when he prays to his father Poseidon to punish him (9. 530–1). Polyphemus' accurate use of language—his mention of Odysseus' full name and social identity—lends his prayer to Poseidon power and efficacy.⁶⁴ The giant has failed in his attempts to communicate with the Greeks, his fellow Cyclopes, and his pet ram, but his address to his father, the god, is successful. Polyphemus uses Odysseus' own words against him and determines the Greek's fate by means of his verbal appeal to Poseidon. At the very time that Odysseus has lost control of his words, the Cyclops finally masters the art of language.⁶⁵

The Polyphemus episode is not, of course, solely about language, but it does point to many questions relating to language and its role in society, questions which were to occupy the Greeks. How did speech develop? What is its purpose? What is the relation between a society and the language it speaks? How are laws related to language? Do all peoples master language equally? Is there a common denominator between speech and diet? What sort of language do gods and animals use? Was language always unique to man? What are the implications of a multitude of languages? What is the relation between a name and the object it describes? In the following chapters, an attempt will be made to trace some of the answers given by Greek writers after Homer to these complex questions.

⁶⁴ Brown 1966 discusses ancient belief in the magical power of the name and its importance for Polyphemus' curse; see Peradotto 1990, 140–1.

⁶⁵ In later classical traditions Polyphemus is known for his singing. See e.g. *Eur. Cyc.* 425–6, 489–90 (where he sings quite badly); Philoxenus, *PMG* 819 and *Theocr.* 11. 19–79 (where he skilfully woos Galatea with his music).

Language in the Golden Age

I. THE NATURE OF LANGUAGE IN THE GOLDEN AGE

A Common Tongue: Babrius and Plato

When did human beings first begin to use language? The answer provided by various Greek writers to this question is part and parcel of their reflections on the origins of civilization: discussions of the earliest speech communities are linked to more general theories on the origins and character of earliest man. We have already seen that, broadly speaking, Greek thinkers had two different approaches to the development of human civilization. According to one view, man originally lived in the age of Kronos, a golden age, where all his creature comforts were provided and he enjoyed a close relationship with the gods.¹ Life subsequently deteriorated, man's material lot worsened, and he became susceptible to a variety of dangers and disadvantages.² A second view sees human beings as progressing or developing from a primitive, bestial state, gradually learning to control their environment and acquiring the accoutrements of civilization.³ These two anthropological theories on the beginnings of civilized man—which can be reconciled or combined at times⁴—lead to two rather different approaches to the beginnings

¹ I use the words 'man' and 'he' deliberately here; in many accounts the golden race consists solely of males who are fashioned by the gods or created of earth, and women have not yet been created. Baldry 1952 points out that Hesiod was the first to combine an older tale of the carefree idyllic age of Kronos with the myth of the golden race of men. This period became known as the golden age much later, in the works of Roman writers from the second half of the 1st cent. BCE onwards, but I shall use the two terms, the golden age and the age of Kronos, interchangeably here.

² Gatz 1967 is the fullest discussion of the golden age. See too Lovejoy and Boas 1935, esp. ch. 2; Blundell 1986, ch. 6; Guthrie 1957, ch. 4.

³ See below, Ch. 4.

⁴ See above, Sect. 1.4. Gatz 1967, 156–61 notes that thinkers such as Theophrastus and Posidonius posit a middle way between the alternatives of descent or

of language. To anticipate somewhat, those who assume an original golden age seem to take man's use of language for granted as part of the idyllic conditions which were provided at that time by the gods, while the thinkers who believe that humans gradually progressed from a primitive, animal-like existence tell of their acquisition of language as one stage, among many, in mankind's overall cultural development. In golden age society speech is present from the very start, while in progress accounts language is acquired, either all at once, as a gift or invention of an outstanding figure, or else slowly as speech gradually evolves by a joint effort of ordinary human beings. This chapter is a survey—arranged by theme rather than chronology—of Greek ideas on the character of language in the golden age.

Babrius

Babrius, the first-century CE poet,⁵ provides a late but very full description of the linguistic conditions prevailing during the age of Kronos. In the preface to his verse versions of Aesop's fables (*Fab. Aes. Preambl.* 1–13), Babrius notes that at the time of the golden race of men, all living creatures possessed articulate voices and knew how to speak. Animals held assemblies in the midst of forests; stones and leaves spoke; fish talked to sailors; and sparrows conversed intelligibly with farmers. There was, he adds, spontaneous production of crops, and friendship between gods and mortals.⁶ According to Babrius, not only were all living creatures capable of using language and conversing with men in the golden age, but nature itself could speak. Since Babrius is about to present a series of fables in which talking animals regularly play a part, he has a vested interest, as it were, in depicting a once-upon-a-time world which included

ascend. They argue for a three-tier model of human development: (1) a primitive, bestial stage, (2) a perfect golden age, (3) technology and its evils. Here the golden age is not the earliest period of human history, the original state of man. In other writers an idyllic age is said to exist in the present day, but far away, in places such as the blessed islands, as in Pindar, *Ol.* 2. 61–77; see e.g. Dillon 1992, 23–6.

⁵ Perry 1965, xlviii–lii presents the reasons for dating Babrius to the second half of the 1st cent. CE.

⁶ This is the gist of Babrius' words. There are two different versions of the twelve opening lines of Babrius' preface—Papyrus Bouriant no. 1 dated to the 4th cent. CE and the 10th-cent. codex Athous—and the two most recent editions, Perry 1965 and the 1986 Teubner edition of Luzzatto and La Penna, have rather different texts. The two lines most important for our purposes (lines 5–6 Perry; 6–7 Luzzatto and La Penna) are, however, virtually identical in the two versions: ἐν τοῖς δὲ χρυσοῖς [sc. γενεαῖς] καὶ τὰ λοιπὰ τῶν ζώων φωνὴν ἔπαυον εἶπε καὶ λόγους ᾤκει. 'In the time of the golden race all the other creatures had an articulate voice and knew words.'

loquacious animals. Babrius invokes wise old Aesop and his stories as proof that animals spoke in the golden age (lines 14–16) and, in fact, animal fables conventionally took place in the age of Kronos. Various fables actually refer to the time when animals had a common language with each other or with men. We find, for instance, the fable opening 'when the animals spoke' *ὅτε φωνήεντα ἦν τὰ ζῷα* already in Xenophon (*Mem.* 2. 7. 13), a passage which pre-dates extant Aesopic collections.⁷

Babrius also mentions the amity between men and gods, and we can assume that in this long ago world human beings conversed with divine figures as well as animals. In Babrius' account, then, men in the age of Kronos have an exceptionally wide range of conversational partners—gods, their fellow men, birds, beasts, fish, stones, and leaves—and the fabulist is unusual in assigning so broad a group of interlocutors to these men of long ago. While Babrius does not actually place gods, men, and beasts in one conversational group it does seem as if he intends to erase all linguistic boundaries between the three groups. Generally, other writers on the age of Kronos either stress the fact that men and the gods share a joint language or portray men and animals as speaking together (and we do not find speech assigned to such inanimate objects as stones and leaves). We can, perhaps, compare Babrius' account to earlier Jewish traditions relating to the Garden of Eden. According to post-biblical Jewish sources there were no linguistic distinctions between God, men, and beasts in Paradise. Animals, too, are said to have spoken Hebrew, the primordial language with which God created the world and in which he addressed Adam.⁸

The golden age is an idyllic world, an imaginary, perfect time with exemplary living conditions, and consequently we can assume that the linguistic situation is meant to be ideal as well. Thus when Babrius and other Greek writers postulate a common language for all in the golden age, with beasts, or even inanimate nature no less capable of speech than men and gods, the implicit message behind

⁷ See also the openings of two fables found in the Aesop *vita*, telling of a time when living creatures spoke the same language (as humans): *ὅτε ἦν τὰ ζῷα ὁμόφωνα* (fab. 384 Perry = *Vita Aesopis* ch. 133) and *καθ' ὃν καιρὸν ἦν ὁμόφωνα τὰ ζῷα τοῖς ἀνθρώποις* (fab. 387 Perry = *Vita* ch. 99) and see further Nagy 1979, 314–16; Perry 1962, 314. For a different approach to animal speech in Greek fables, see Pelliccia 1995, 62–3, 68–9.

⁸ See e.g. Jubilees 3: 28 with Charles (1902, 27–8) ad loc.; see too 12: 25–6. Jubilees is generally dated to the second half of the 2nd cent. BCE—see Rubin 1998, 309 with n. 16.

this description is that ideally, in the best of all possible worlds, everyone (and everything) should be able to converse together. The broadest possible speech community, with full communication between gods, men, beasts, and nature, is the optimal situation. It is possible that gods, men, and the various species of animals in the golden age each had their own individual languages, besides sharing a joint form of speech. The situation may have been like the Pentecostal experience, with harmony and unity arising out of a diversity of languages,⁹ but it is more likely that there was only one language at the time. In most depictions of the era of Kronos, conditions are idyllic but simple, and one common tongue shared by all creatures would seem to fit this scheme best.¹⁰

We are given next to no information on the actual language used by these golden age speakers and, somewhat surprisingly, are not told by any Greek author that the earliest form of speech, the language used in the age of Kronos, was Greek. There is perhaps a parallel situation in the Old Testament, where it is not actually stated that Hebrew was used in the Garden of Eden, even if etymologies such as those found at Genesis 2: 23 (and 3: 20 and 4: 1) seem to indicate that they are based on this common assumption. The lack of explicit information in the Bible on the language spoken in the Garden of Eden led, from ancient times onwards, to heated debates on the nature of the primordial language. Greek, Latin, Syriac, Flemish, French, Swedish, etc. were all put forward as humankind's original language, in addition to Hebrew.¹¹ If the Greeks do not discuss the precise identity of golden age language this may simply be because it was taken for granted that Greek was the original tongue.¹²

Speech in the time of Kronos was ideal, then, because of its universality, but was it perfect in other ways as well? Was it an Adamic

⁹ Acts of the Apostles 2: 1–4; compare 1 Cor. 14; see the discussion in Barański 1989, 214.

¹⁰ In the Callimachus fable discussed below, men and animals originally speak the same language but animals nonetheless have unique voices of their own. Interestingly, Porphyry (*De Abst.* 3. 3. 6) refers to men of old who understood all the languages spoken by animals.

¹¹ For the debates see Olender 1992, esp. ch. 1: he notes how in 1688 Andreas Kempe satirically has God speaking Swedish, Adam using Danish, and the serpent tempting Eve in French. See too Eco 1995, chs. 1 and 5; Katz 1981, 132.

¹² Thus Vernant vii in Olender 1992. Compare the suggestion by the poet and Epicurean philosopher Philodemus that Greek (or something close to it) was the language of the gods (*De Deis* 3. 14. 6–8, p. 37 Diels).

language, a lucid and illuminating tongue, unsurpassed in its capacity to express the very nature or essence of things by means of its words.¹³ A primordial, universal language need not be divine or perfect¹⁴ and speech conditions in the age of Kronos may have been analogous to the food situation at that time. In most accounts of the golden age we are told that the earth supplied an abundance of food of itself, with no labour or effort expended by anyone. This effortless abundance is what was unique and ideal, while the food itself—in many accounts of the golden age—was not particularly cultivated or refined.¹⁵ Similarly, it is the abundance of speech in the golden age, the effortless use of language by all creatures which is ideal, and the actual language spoken may not have been especially refined or sophisticated, not to say Adamic.

Plato

Indeed, we find in Plato's account of the golden age some reservations about the use of speech by the creatures of that era. Plato describes the age of Kronos in the *Politicus* (269a–274e; esp. 271c–272d).¹⁶ Kronos acts as a shepherd towards humans, who grow younger, rather than older. No animals were wild or ate one another (οὐτ' ἄγριον ἦν οὐδέν οὔτε ἀλλήλων ἐδωδαί 271e1) in this golden age, and there were no wars. Nor were there any political organizations, wives, or children. The earth bore fruit of its own accord and there was no agriculture. People lived mainly outdoors, and did not wear clothing. And, most important for our purposes, in this world of long ago outlined by Plato, men could also speak with animals. This was a good thing—and the age of Kronos was happier than our own—the Stranger of the *Politicus* argues (272b–d), if men actually used the opportunity to converse with the various species and make use of each one's unique knowledge to add to the general store of wisdom. If, however, men of the age of Kronos just used their leisure time to fill themselves with food and drink and to converse

¹³ For the salient features of Adamic language see e.g. Steiner 1992, 58–9; Aarsleff 1982, 25–6 and 260–1; Eco 1995, *passim*.

¹⁴ See Eco 1995, 73–4, who notes that the distinction between an original language and a perfect one is not always kept in mind by ancient or modern thinkers.

¹⁵ Spontaneous production of food: Hes. *Erga* 117–18; Pl. *Pol.* 271d–272a; *Laws* 713c; Virg. *Ecl.* 4. 26–45; *Geor.* 1. 125–8; Luc. *DRN* 5. 933–44; Tib. 1. 3. 41–6; *Ov. Met.* 1. 101–12; compare Pl. *Laws* 678d–679c and *Arat. Phaen.* 112–13. See Gale 1994, 165–6 with n. 37.

¹⁶ For a useful survey of recent discussions of the *Politicus* myth, see McCabe 1997; see too Blundell 1986, 149–53; Dillon 1992.

with animals in the way that they are shown doing in current tales, then present-day men are better off than such people were, the Eleatic Stranger concludes. (The 'current tales' mentioned by Plato's Stranger is probably a reference to comic parodies of the reign of Kronos, where men are shown carousing and feasting on food which is provided of its own accord and begs to be eaten—see below.)¹⁷

In this passage, Plato points to the possible pitfalls of universal communication. The wide range of speakers in the golden age means that an ideal language for that time would be one which was well suited to all of its users. Since one and the same language was spoken by a variety of very different creatures, their common discourse may have been elementary, in content (and possibly form as well). Topics of conversation—between men and animals at any rate—could have been quite basic, a reflection of the simple, uncomplicated interests the two groups held in common. Thus it is conceivable that communication in the golden age, while all-encompassing, was on a fairly low level, and in his account Plato raises the possibility that the common language—or, to be more precise, mode of discourse—in the golden age was not philosophical but trivial. Plato stresses the difference between philosophical discourse and a common tongue shared by all. The philosopher's ideal communication in the golden age involves men and the various animals embarking on a joint investigation of each species' particular capacities and using these unique qualities of perception to add to their common understanding (πυνθανόμενοι παρὰ πάσης φύσεως εἰ τινα τις ἰδίαν δύναμιν ἔχουσα ἡσθετό τι διάφορον τῶν ἄλλων εἰς συναγυριὸν φρονήσεως 272c2–4). This passage of the *Politicus* points to the two quite different ways a universal language can be utilized—as a philosophical tongue where the common base allows everyone to exchange, share, and develop scientific knowledge, or for trivial exchanges (over food and drink) which presumably draw upon the lowest common interests shared by the various interlocutors. We cannot know, Plato's Stranger adds, in which of these two ways creatures of the golden age chose to use conversation.

¹⁷ See Dillon 1992, 29–30, who thinks that the current tales are a reference to Aesopian fables, and compare Rowe 1995, 194 (ad 27ac7–d1). McCabe 1997, esp. 105–8 has an interesting discussion of the reasons why the age of Zeus in Plato's myth is better suited to philosophizing than the age of Kronos.

Adamic and Universal Languages

An Adamic Golden Age Language?

Here, then, Plato suggests that the original universal language could have been used as a tool to advance philosophical knowledge. This implies that Plato's universal language of the age of Kronos, even if used properly, was not an Adamic tongue. In an Adamic language, names mirror essences and there is a perfect correspondence in language between word and thing. Such a tongue already contains the essential knowledge of an object in its very name and renders philosophical inquiry superfluous. If Plato's golden age creatures spoke such a language they would not need to investigate each species' unique traits in order to create a pool of common knowledge: simply sharing a joint language and knowing the names of things would suffice.¹⁸ If Plato's golden age language in the *Politicus* is not Adamic, we do find a discussion of such a perfect language elsewhere in the philosopher's writings. In the *Cratylus* Socrates assigns an ideal language to the gods, noting that they speak a correct language, calling things by their natural names, which reveal their essences, while men do not.¹⁹ We are also told that the first, that is, earliest, names were of divine origin and this would seem to indicate that the very first language was the language of the gods. Speech, it is claimed, was then corrupted over time, so that language no longer serves as a lucid mirror of nature.²⁰ It seems clear from the etymological discussions of the *Cratylus* that Greek was not thought to be the oldest language, for there are hints that some Greek words are derived from barbarian languages that are older than Greek.²¹ We hear, then, in the *Cratylus* of an original, perfect language of divine origin which has changed for the worse over time. But there is no link in the *Cratylus* between this first Adamic

¹⁸ See Simone 1998, 171 (on the aim of those who created universal languages): 'The signified could be "read" in the signifier and in the opposite way, the signifier would be "dictated" by the signified itself.' Kretzmann 1971, 137: every name would bear its credentials on its face.

¹⁹ Divine language: *Crat.* 391d2-e3; compare 400d6-9; see Baxter 1992, 112 and see below, Sect. 3.

²⁰ Divine origin of first words: *Crat.* 438c (Cratylus speaking); see 397b-c (Socrates) and contrast 425d. Corruption of language: e.g. 418b-419b (Socrates); compare 434c-d and see 435c where Cratylus seems to concede that words can change for the worse.

²¹ *Crat.* 425e-426a; compare 421d; see also 410a; 412b; 416a.

language of the gods, whose words reflect the essential characteristics of the objects they denominate, and the golden age, for this language of the gods is not assigned to the age of Kronos.²² Nor is there any mention in the *Cratylus* of golden age creatures who spoke a perfect language, a language identical with that now used by the gods.

We do find traces of a theory of a perfect golden age language in Stoic writers: scholars suggest that Stoic thinkers linked an original Adamic language with the golden age.²³ The Stoics apparently posited an original, rational language, conceived by rational man, with the first words expressing the nature of the things they named.²⁴ Words were corrupted over time, and in parallel fashion, primitive man who originally lived rationally and in harmony with nature, subsequently changed for the worse.²⁵ Can these harmonious men and their perfect first language be assigned to the golden age? The Stoics seem to have described namegivers, wise men who imposed the perfect correspondence in language between word and thing, and such wise men were, according to the Stoics, the first kings.²⁶ Posidonius tells us that wise men were kings in the age of Kronos,²⁷ and thus we arrive, somewhat tentatively, at a Stoic conception of an Adamic golden age language. An original Adamic language which was subsequently corrupted, such as the gods' language in the *Cratylus*, must be reconstructed if it is to yield up its secrets. This means that the study of etymologies is a serious philosophical pursuit, for it is an attempt to recover the original form of words in order to uncover their true meanings and reveal the

²² Note, however, the remarks of Baxter 1992, 112, who points to a possible link in the *Cratylus* between the knowledge of correct names and membership in the golden race of men. Euthyphro, an expert in etymologies, is said to impart a *δαμονία σοφία* (396d); subsequently Socrates links *δαίμονες*, said to be members of the golden race, with wise men (*φρόνιμοι καὶ δαίμονες* 397d-398e).

²³ See Frede 1978, 68-9 with notes on 75; Blank 1982, 21-2 with notes on 77; Sluiter 1990, 18-22 and 209.

²⁴ See Origen, *Contra Celsum* 1. 24 (= *SVF* ii. 146): *φύσει μνησθέντων τῶν πρῶτων φωνῶν τὰ πράγματα* (καθ' ὅν τὰ ὀνόματα) and Philo, *De Opif. Mundi* 150 (rational words and rational man). Philo is thought to be influenced by Stoic thought here—see Sluiter 1990, 19-20 with n. 72 and compare Blank 1982, 77 n. 2.

²⁵ Corruption of men: Diog. Laert. 7. 89; see too *SVF* iii. 228-36 and see Sluiter 1990, 19-20.

²⁶ Both these points are speculative; see Blank 1982, 77 n. 5 and Frede 1978, 69 and 75 n. 17, who cites Philo, *De Opif. Mundi* 148; *Quaest. in Gen.* 1. 30; Varro, *Lingua Latina* 5. 8-9. The first two texts refer to the biblical Adam as wise king and name-giver, while Varro's royal namegiver is a *rex Latinus*.

²⁷ Seneca, *Ep.* 90. 5 = fr. 284 Edelstein-Kidd.

essences of the objects they denominate.²⁸ Thus we find a whole series of etymologies in the *Cratylus* and considerable Stoic interest in etymology as well. The actual etymologies developed by Socrates in the *Cratylus* are nonetheless quite playful: the name of Kronos, for instance, is derived from his clean, pure mind.²⁹

Universal Languages

Later Western thinkers will continue this attempt to retrace the original, perfect language of mankind in order to unlock the secrets of the universe which it contained. The search for the perfect language, identified by Western thinkers with the biblical Adam's original tongue in the Garden of Eden, continued throughout medieval times, the Renaissance, and early modern period.³⁰ In the seventeenth and eighteenth centuries, several European thinkers abandoned the search for the original language of humankind and turned instead to a new kind of universal language, one which they themselves could create.³¹ Men such as Francis Bacon, Jan Amos Comenius, George Dalgarno, and John Wilkins found fault with existing languages and, looking forward rather than backward, aimed at constructing a new ideal language. A variety of disparate goals were to be realized by means of this universal language. The common tongue was intended to allow communication between various peoples, facilitate trade, propagate the Bible, and at the same time express reality in a rational and ordered way, and thus advance scientific knowledge. This desire for a universal language which would facilitate scientific research is, in essence, a return to Babel: once again men aspired to speak one language and build monumental works together.

These seventeenth-century European thinkers wished to create a

²⁸ The idea that etymologies will lead to essences is found in the very word 'etymology' *ἔτυμος λόγος* i.e. true word (or account); the term was apparently coined by the 3rd-cent. BCE Stoic philosopher, Chrysippus. For the use of etymologies by early Greek thinkers, see Sluiter 1997, 155–63; Kraus 1987.

²⁹ *κρόνον . . . σημαίνει . . . τὸ καθαρὸν αὐτοῦ καὶ ἀκρίβητον τοῦ νοῦ Crat.* 396b. See Baxter 1992, ch. 4 and Barney 1998 on the etymologies of the *Cratylus*; Sedley 1998b is an interesting attempt to take these etymologies seriously. For the Stoics, see the cautionary comments in Long and Sedley 1987, i. 195; see too Sluiter 1997, 155–63; Amaler 1989.

³⁰ See e.g. Eco 1995, *passim*.

³¹ See Slaughter 1982, *passim*; Knowlson 1975, appendix B, 224–32 has a comprehensive list of 17th- and 18th-cent. schemes of universal writing and language. Robins 1990, 126–30; Aarsleff 1982, 260–1; Simone 1998, 170–6 all have brief surveys.

language which would be both universally intelligible and philosophical, 'a language absolutely new, absolutely easy, absolutely rational, in brief a Pansophic language, the universal carrier of Light', as Comenius put it.³² Some of these philosophical languages were based on sounds, that is were phonetic tongues, meant to be spoken, while others used 'real characters', that is, written or graphic symbols which referred to things themselves rather than words. These symbols could, it was thought, be read by everyone, no matter what their native tongue. (This was based on a misunderstanding of the Chinese form of writing and its users.)³³ Thinkers who conceived such universal languages, men such as Comenius and Wilkins, realized that existing knowledge needed to be comprehended, codified, and organized in order to create a philosophical language. The lexica of such philosophical languages were not based on the vocabularies of existing languages, but on a model of nature, or of reality, or of scientific knowledge and included a conceptual classification of the things the language was used to talk about.³⁴ Thus, the formulation of universal languages and an attempt to survey, classify, and order all the workings of nature went hand in hand in these seventeenth-century trials.³⁵ Here we come back to the golden age language which Plato outlines in the *Politicus*, for it is a language, common to all, but one which entails a synthesis of the investigations of each species in order to become truly ideal. In Plato's description of the various species conversing together in order to discover the unique perceptions of each group and add to the general store of knowledge we find, perhaps, the forerunner of the taxonomic surveys undertaken by the inventors of universal languages in the seventeenth century.

It is worth remembering, however, that unlike these seventeenth-century European figures, Plato does not discuss here the components, morphology, or syntax of golden age language, only the use to which a universal language should be put. In the *Cratylus* (424b–425b), however, Socrates outlines the components of a model hypothetical tongue, describing briefly the way a precise, systematic language, where every name would reflect the nature of the object it

³² Comenius, *Via Lucis* as quoted by Bennett and Mandelbrote 1998, 108. The *Via Lucis* was published in 1668, but written some 2 decades earlier.

³³ See Simone 1998, 155, 157, and 217 n. 21; Harris and Taylor 1997, 115.

³⁴ Knowlson 1975, ch. 3; Slaughter 1982, 126.

³⁵ Slaughter 1982, *passim*; further refs. in Simone 1998, 219 n. 45.

denominates, could be constructed. (Perhaps Socrates is outlining the principles according to which he believed the divine language of the gods was assembled: human beings could then attempt to retrace the process and arrive at a perfect language.) This ideal language is formed by means of several steps. First, words are divided into their primary elements—syllables, consonants, vowels, etc. Next, reality is analysed: the things which exist and are to be named must be divided into their respective primary elements, being analysed in the same way that names are analysed.³⁶ The next stage involves applying names to things according to likeness or mimetically (κατὰ τὴν ὁμοίότητα 424d6), using either a basic element as a name for an object or else mixing together elements to form syllables and words which are then used as names. Plato compares this process of composing names to the work of a painter, who sometimes uses plain, unmixed colours to produce a likeness and sometimes blends his paints to form new colours. While Socrates quickly dismisses the possibility of constructing such a language (425d), it is interesting to find that this ideal tongue involves a taxonomy of sorts.³⁷ We find, then, both in the *Cratylus* and the *Politicus* traces of a philosophical language used to investigate, clarify, and comprehend all types of knowledge. Plato's ideal language foreshadows the demands made of a universal tongue by seventeenth-century thinkers in England and France.³⁸

Descartes, one of the earliest of the European thinkers to discuss a universal language, echoes Plato's distinction in the *Politicus* between a common international language and a philosophical language founded on the investigation and classification of scientific knowledge. Descartes objected to the idea of a universal language based on primitive words taken from existing languages and argued for a philosophical language which could be constructed and formulated only after all possible human thoughts were ordered and arranged. Such clarity and simplicity would lead to the acquisition

³⁶ The text here, *Crat.* 424d, is difficult. For a discussion of the whole passage, see Baxter 1992, 76–8, 171–2; Kretzmann 1971, 137; Gentinetta 1961, 60–7. Kraus 1987, 164–7 thinks that the *Crat.* passage may have been influenced by Democritus' atomism and notes the Atomists' comparison between letters and atoms—see DK 67 A6 and see further below, Sect. 4.5 with n. 188.

³⁷ On taxonomy in the *Cratylus*, see Kretzmann 1971, 128 and compare Baxter 1992, 40–1 with n. 43; see too *Crat.* 388b–c.

³⁸ See Baxter 1992, 65–72 for a discussion of the model language of the *Cratylus* against the background of language speculation in the 17th and 18th centuries, particularly the ideal language of Comenius.

of genuine scientific knowledge, Descartes thought, but only true philosophy could bring about a universal language of this kind.³⁹ (Descartes is, of course, putting the cart before the horse, when he postulates the use of logic before language.) He adds that the world would have to become an earthly paradise before a universal scientific language would come into being and indeed the philosophical language sought after in seventeenth-century England and France 'was the exact equivalent of the philosopher's stone',⁴⁰ an unfulfilled (and unrealizable) scheme. Plato is perhaps more realistic than these European thinkers, for his universal language is an original golden age one, lost once that mythical period had ended.

Speaking Animals

We have seen that in his description of the age of Kronos, Plato suggests two possible ways in which men of the golden age may have spent their time, in learned conversation or in thoughtless partying. Proclus when discussing this passage of Plato (*Theologia Platonica* 5. 7–8) thinks that the men of the *Politicus* myth did in fact use their time to acquire wisdom by conversing with other species, plucking intellectual fruits (καὶ τοὺς νοερούς δρέπονται καρπούς).⁴¹ Plutarch, in similar fashion, has the inhabitants of the island of Kronos spend their time in philosophical conversation (περὶ λόγους τινὰς αἰεὶ καὶ φιλοσοφίαν διατρίβουσι *De Facie* 941e) and we find parallel descriptions of various cultural activities pursued by men in another idyllic time, the afterlife.⁴² Yet it is possible that the golden race, which was not privy to many of the refinements of civilization, was not quite so intellectual. Perhaps life in the age of Kronos was not all that different from the physically comfortable, but spiritually dissatisfying existence to be had in the 'city of pigs' outlined in Plato's *Republic* (369a–372d). Golden age creatures could have been culturally limited beings who used the gift of a universal language for simple and rather mindless purposes.

³⁹ See Descartes's letter of 1629 to Mersenne in Kenny 1970, 3–6; see too Eco 1995, 216–18; Slaughter 1982, 126–9.

⁴⁰ Aarsleff 1982, 261.

⁴¹ Compare Rowe 1995, 193 (ad *Pol.* 272b8–c5), who also thinks that these golden age men could have learned something philosophical from their animal friends.

⁴² See [Pl.] *Axiochus* 371c–d; Aristotle fr. 58 Rose and the further references in Gatz 1967, 188–9. In the *Politics* (1334^a28–34) Aristotle points out that people—such as the inhabitants of the Islands of the Blessed—who possess every good have a special need for philosophy (and justice and temperance). See too Dillon 1992, 30 and 35 n. 18.

Depictions of the golden age in fifth-century comedies certainly present life in the golden age in this latter fashion. They stress the material enjoyment of life, the second of Plato's two alternatives.⁴³ Men are said to lead a life of ease and abundance, and food is provided of itself, with no effort on their part. Such automatic provision of the necessities of life is a feature found in many depictions of the age of Kronos, but writers of ancient comedy parody this situation and take the life of effortless ease one stage further. There is no need for slaves in this comic world, for objects arrange and move themselves, while rivers of food flow by, begging to be eaten. Animals and even objects are said to speak in comic portrayals of the age of Kronos, but as far as can be seen from fragments of these lost plays, such possession of speech is usually linked to the central theme of endless, unconstrained eating. In Crates' *Beasts* (*Θηρία*) we find that fish speak aloud while they are being cooked in order to announce that they are not completely fried. They are then instructed to turn over and salt themselves. Speech is also extended to water, which flows freely into containers and gives notice when the vessels are full. At the same time it is worth noting that the eponymous chorus of Crates' play, the beasts, use their powers of speech for more serious purposes. These beasts are gentle golden age creatures who urge men to abstain from animal flesh, and to eat fish and vegetables instead (fr. 19 K.-A.): here we find a link between speaking animals and vegetarianism.⁴⁴ In another fifth-century play, by Telecleides, different kinds of baked goods compete with one another and beg to be eaten. In these comic parodies, various conventional features associated with golden age life—nature supplying food, talking animals—are distorted to create a fantastic world of luxurious ease.⁴⁵ The concept of a universal language is subverted here, along with the idea of the natural provision of food: animals and objects speak with men simply in order to make the latter's life run even more smoothly and effortlessly. Golden age harmony and unity have been replaced by indolence and opulence. It seems likely that Plato was

⁴³ Athenaeus 6. 267 ff. is the chief source for these comic fragments. See too the refs. collected by Gatz 1967, 116–21 and see Lovejoy and Boas 1935, 38–41 and Blundell 1986, 155–6.

⁴⁴ See too frs. 16–17 K.-A. See Baldry 1953, esp. 53–4 and below, Sect. 4.

⁴⁵ Telecleides' *Μυφικτιόνοες* fr. 1 K.-A.; see esp. ll. 4–5, 13. This comic scenario of a flow of food asking to be consumed is not restricted to portrayals of the golden age and is found in two related utopian or fantastic situations, the world below of Eleusinian mysteries and depictions of life in the lap of Persian luxury; see Gatz 1967, 116–22.

influenced by these comic distortions and caricatures when he imagines golden age men and animals talking over food and drink (above, text near n. 17).

We find two accounts of speaking animals in later Greek authors. The Jewish writer Philo (*De Confusione Linguarum* 6–8), recounts a tale told by fashioners of myth (*πρὸς μυθοπλαστῶν* 6) of a common language spoken long ago by the creatures of land, sea, and air. The animals' possession of a joint language led to a communication of their experiences, good and bad, and to a community of feeling, a sharing of their various joys and sorrows.⁴⁶ Here then, a universal language among animals, used to communicate feelings and experiences, leads to communal accord and harmony: a common language in the golden age would serve a similar function, uniting an even wider community of gods, men, and animals. Philo then relates that the animals eventually suffered from a surfeit of blessings and began to make unreasonable demands, asking to be granted immortality. They were then punished by having their single language broken up into different dialects so that they were no longer able to understand one another. Philo records this tale when discussing the biblical story of the Tower of Babel, and his talking creatures are punished by a Babel-like fragmentation of language, rather than a loss of the power of speech.

An earlier version of the tale, a fragment of Callimachus, has these animals lose language altogether.⁴⁷ Callimachus assigns the fable to 'Aesop the Sardinian'⁴⁸ and tells of how creatures—winged, in the sea, and four-footed—speak the same language as men in the time of Kronos. While the fragment makes no mention of any community of feeling brought about by this universal language, these creatures, too, become dissatisfied with their lot. They anger Zeus, complain—

⁴⁶ Philo, *De Confusione Linguarum* 7: τὰς τε γὰρ ἡδονὰς καὶ ἀλγῆς ἀλλήλους ἀναφέροντα διὰ τοῦ ὁμοφώνου συνήδονο καὶ συναρτίζοντο.

⁴⁷ Callimachus, *Iambus* 2 fr. 192 Pfeiffer. The text of the fragment is based mainly on the lacunose *P. Oxy.* 1011; the first 3 lines are also quoted by other writers. The content of Callimachus' iambic poem can be supplemented by the *Διηγήσεις*, a papyrus summary outline of the Hellenistic writer's poems (*Dieg.* 6. 22–32). See Perry 1965, 505–6 and 1962, 312–14. Kerkhecker 1999, 49–63 is a recent, comprehensive discussion of the poem. Note his comment on the paradoxical qualities of the tale (58): 'Zeus takes away from the animals what man already owns—the gift of speech; and he transfers to mankind what the animals still possess—their voices.'

⁴⁸ Perry 1962, 314, notes that the fable is not attributed to Aesop elsewhere, but it is fitting that Aesop, who so frequently narrates the conversations of animals should explain how their language disappeared. Philo is acquainted with the Hebrew Bible, while Callimachus, it seems safe to say, is not.

ing that the god's rule is unjust and asking for a release from old age (as in Philo). The god then takes away the animals' speech and bestows it upon men. Presumably these animals all spoke one language, but in their different, individual voices, for Zeus gives one person the voice of a dog, another that of a donkey, etc. Since that time, Callimachus adds, men have become quite talkative (*πολύμυθοι καὶ λόγοι*). Here, then, the animals' loss of speech leads to a linguistic break between men and animals, rather than among the animals' themselves as in Philo's tale. This loss of language by animals, a narrowing of the speech community, should probably be linked with the ending of the idyllic golden age. Indeed Callimachus, after mentioning the linguistic conditions prevalent in the age of Kronos (line 4), then introduces Zeus (line 6; compare *Dieg.* 6. 26). It seems that the younger god has now usurped his father's throne and the golden age has ended. Perhaps it is not a coincidence that the animals have their speech taken away and are reduced from virtually human status to a more beast-like state because of their audacity in requesting a divine quality, eternal youth. The animals in Callimachus' tale complain about Zeus' lack of justice and their subsequent punishment brings to mind Hesiod's famous description of how Zeus has given justice to men, while animals, who are without justice, eat one another (*Erga* 276-8; see above, Sect. 1.3). Presumably Callimachus' speechless animals now become altogether unjust and begin to eat one another: the golden age has ended.⁴⁹

Utopian Languages

It is not only in depictions of the golden age, comic or otherwise, that we find exceptional linguistic conditions. Other idyllic times and places, utopian communities of various kinds, also have special languages. One such community may have been Ouranopolis, a city founded shortly after the death of Alexander the Great by Alexarchus, brother of the ruler of Macedon, Cassander. The founder of this 'city of heaven' apparently identified himself with the sun and, according to the coins that he struck, termed his fellow citizens children of heaven (*Οὐρανίδαι*). Alexarchus was said to be learned (*γραμματικός*)⁵⁰ and he introduced several idiosyncratic

⁴⁹ Elsewhere in his writings Callimachus includes other unusual speakers: talking statues, unborn infants, trees, and crows—see *fr.* 114, 199, *Del.* 86-90, 189-90 and the further references in Pelliccia 1995, 72-3 with n. 118.

⁵⁰ Clement, *Protrepticus* 4. 54.

expressions (*διαλέκτους ἰδίας εἰσήγγεικεν*), such as calling a barber a 'mortal shaver' (*βροτοκέρτης*). Athenaeus, our source for this last statement, reproduces a letter written by Alexarchus, an unintelligible document written in what seems to be garbled Greek.⁵¹ While it has been argued that Alexarchus' city was meant to be a utopian world state and his language a universal tongue to foster international brotherhood, the evidence for this is flimsy. All we can say with certainty is that Alexarchus coined a new language of some kind, apparently for the city that he founded.⁵²

Plutarch provides much firmer evidence for a link between utopian times and a universal language, in his description of Persian beliefs. According to Plutarch, Persians think that at a destined time, an evil god will disappear, plague and famine will be destroyed, and the earth will be flat and level. One way of life with one government will arise, with all men happy and speaking the same language.⁵³ It does not matter for our purposes if Plutarch is misguided in ascribing such beliefs to the Persians:⁵⁴ what is important is his mention of one language spoken by all as one of the blessings of an eschatological end of days. In Jewish sources, we find a parallel belief: one language, Hebrew, will be spoken again by all nations at the end of the days, thus reversing the effect of the Tower of Babel.⁵⁵

Utopias can be found in a golden age at the beginnings of time, at a distant point in the future, or in the present, in a faraway land. Iambulus, whose lost work is summarized by Diodorus Siculus (2. 55-60), provides a vivid description of a utopian community which he allegedly visited.⁵⁶ The island, one of seven located at the equator, has a mild, pleasing climate and the people on it live an ideal, temperate life. They are long-lived, hold children in common, and food is supplied to them in abundance. The islanders, said to be remarkably beautiful, have double tongues and consequently can

⁵¹ Athen. 3. 98d-f. Heracleides of Lembus is his source.

⁵² See Tarn 1948, ii. 429-34 for Alexarchus the universalist. Baldry 1965, 124-5 and Ferguson 1975, 108-10 are more sceptical.

⁵³ ἕνα βίον καὶ μίαν πολιτείαν ἀνθρώπων μακαρίων καὶ ὁμογλώσσων ἀπάντων γενέσθαι *De Is. et Osir.* 370b.

⁵⁴ Thus Griffiths (1970, 479-80), who thinks that this is a Babylonian tradition.

⁵⁵ See the Qumran fragments 4Q464 fr. 2-3; *Testament of Judah* 25: 3 (p. 78 de Jonge); *Tanhuma Yelamdenu*/Midrash *Tanhuma* Genesis 11 (p. 28 Buber). See Eshel and Stone (1995), 218-21; Rubin 1998, 310-11 and the further sources there.

⁵⁶ It is difficult to assign Iambulus an exact date, and estimates range from the early 3rd to mid-1st cent. BCE—see e.g. Baldry 1965, 124 and Ferguson 1975, 124-9.

carry on two conversations at once. The two tongues are a physical manifestation which is, we are told, partly the work of nature and partly a deliberate contrivance (2. 56. 5–6). In other words, the island's inhabitants have a natural tendency to polyglottism which they further enhance. Normally two tongues are an indication of treachery or hypocrisy,⁵⁷ but here they are an external sign (and cause) of the islanders' ability to carry on the widest possible communication with others. The people on the island can imitate every articulate language known to man, the many sounds of birds, and virtually every sound (ποικιλωτάτους αὐτοὺς εἶναι ταῖς φωναῖς οὐ μόνον πάσαν ἀνθρωπίνην καὶ διηρθρωμένην διάλεκτον μιμουμένους, ἀλλὰ καὶ τὰς τῶν ὀρνέων πολυφωνίας καὶ καθόλου πάσαν ἥχου ιδιότητα προῖεσθαι 2. 56. 6). Presumably they do not simply imitate these languages and sounds, but use them to communicate with different peoples, birds, etc. Communication is at a premium here, and interestingly, the islanders' ears are much larger as well, perhaps to allow them to hear all these sounds.⁵⁸ They are also said to have some kind of valves to close their ears.

Since the people of the island allegedly live in the here and now, in Iambulus' time, and not in a golden age in the past, they cannot, by definition, speak a universal language. Iambulus grants them the next best thing, the knowledge of all languages, human and otherwise. Given a world in which there is a wide variety of peoples and tongues, speaking all languages is the alternative to, virtually the equivalent of, a universal language. The effect in this ideal faraway land is the same: the islanders can converse with every living creature. It is worth noting that not every polyglot people uses their linguistic abilities for the good. There is a tale from the medieval *Liber Monstrorum de Diversis Generibus* (1. 40) on a people who could speak every human tongue (*linguas omnium nationum*). They use this knowledge to astound visitors from afar, stunning them by addressing them in their language, only to decapitate them and eat them raw. We will encounter below (Sect. 5.4) fabulous tales of a beast, the corocotta, which knows how to imitate the language of men to the extent of calling individuals by name. It uses this linguistic ability to lure men to their death.⁵⁹

⁵⁷ See Dubuisson 1983.

⁵⁸ This is according to the reading found in some MSS at 2. 56. 4 τὰ μὲν τῆς ἀκοῆς ῥήματα (the apertures of hearing, i.e. ears), rather than τῆς ῥινός (the nose, i.e. nostrils).

⁵⁹ See Rohde 1914, 246–7 n. 2.

We are told that Iambulus' islanders are interested in all branches of learning, particularly astrology. They have a special alphabet of 28 letters composed of 7 characters, each configured in 4 different ways and the islanders write from top to bottom rather than horizontally.⁶⁰ Iambulus' innovative writing with the same characters written in slightly different ways to indicate a change in function is reminiscent of the principles underlying the compact forms of writing invented by seventeenth-century thinkers such as Lodwick and Wilkins for the 'common writing' or 'real character' of their universal languages.⁶¹ Other seventeenth- and eighteenth-century writers described fanciful languages when giving an account of their imaginary voyages, just as Iambulus does here. The Europeans' imaginary languages spoken in utopian countries reflected contemporary linguistic and philosophical concerns,⁶² and perhaps Iambulus' description also points to linguistic speculation in his time, speculation which has not survived. We shall see that allegedly real accounts of exotic languages found in Greek ethnographical writings contain, at times, traces of theoretical reflections on the role of language (below, Sect. 5.2).

If universal speech (or at least universal intelligibility) is a feature found in some Greek utopias, often the question of the language used in ideal communities is simply ignored. A particularly interesting case in point is provided by the Stoics. Stoic thinkers generally stressed the unity of mankind and we have seen that they seem to have written of an ideal, Adamic golden age language. Some of the early Stoics did not speak Greek as their native tongue and must have had to deal first-hand with the difficulties inherent in a multilingual environment.⁶³ Nonetheless, as far as we can tell, not one of the model cities outlined by the Stoics touches upon a universal language and the problems of polyglottism are disregarded.

⁶⁰ Diod. 2. 57. 3–4. Compare the Egyptian hieroglyphics used in Euhemerus' utopia (Diod. 5. 46. 7) and see Ferguson 1975, 126; Rohde 1914, 252–6 n. 3.

⁶¹ Lodwick: Eco 1995, 260–3; Slaughter 1982, 118–19; Bennett and Mandelbrote 1998, 111–13. Wilkins: Eco 1995, 242–5; Bennett and Mandelbrote 1998, 116–18; Harris and Taylor 1997, ch. 9.

⁶² See Cornelius 1965; Pons 1979.

⁶³ See Baldry 1965, 151–2; Ferguson 1975, 111–21. Zeno of Citium was called a Phoenician by his contemporaries and Galen criticised the Greek written by Chrysippus of Soli; see Hovdhaugen 1982, 48.

2. EARLY LANGUAGES

Let us return to the golden age. Plato's suggestion that men in the time of Kronos may have lived unreflective, virtually vegetative lives, at one with beasts in their mindless contentment points to a problematic aspect of the 'soft primitivism' assigned to various utopian societies.⁶⁴ How did people who had their every need attended to from the outside, with no effort of any kind required from them, actually spend their time?⁶⁵ In a world in which everyone lived in harmony and had all their wants supplied, what was language—a language spoken by men and animals alike—used and needed for? To frame the question more broadly, if nature was so generous and benevolent to golden age creatures, what need was there for culture? And in a place and time when civilized man's unique possession, language, is shared by animals as well, what constitutes culture?⁶⁶

It is worth looking here at a famous passage of Aristotle's *Politics* (1253^a1–29) dealing with man as a political creature. Aristotle says that those who do not live in a political framework—and such is the case with golden age men—are either inferior or superior to men.⁶⁷ Animals are incapable of forming a state, while self-sufficient gods have no need of one.⁶⁸ It is the possession of speech—the unique quality of man which distinguishes him from animals⁶⁹—which

⁶⁴ See Lovejoy and Boas 1935, 9–11 for the terms 'soft' and 'hard' primitivism.

⁶⁵ Blundell 1986, 136: 'We are often left wondering what people actually *did* in the Golden Age.' See too Ferguson (1975, 129), who speculates as to how Iambulus' ideal inhabitants of the Islands of the Sun whiled away their time.

⁶⁶ See the interesting remarks of Leach 1969, 310–11 on Lévi-Strauss's understanding of the myths telling of a time when men and animals both talked, as an expression of the 'universally persistent interest in the problem of what constitutes the humanity of man, the contrast between culture and nature'. In a golden age there is, it seems, no sharp division between nature and culture.

⁶⁷ ὁ ἄνθρωπος φύσει πολιτικὸν ζῷον, καὶ ὁ ἄπολος διὰ φύσιν καὶ οὐ διὰ τύχην ἦτοι φαῖλος ἔστιν, ἢ κρείττων ἢ ἄνθρωπος (Pol. 1253^a2–4).

⁶⁸ See ὁ δὲ μὴ δυνάμενος κοινωνεῖν ἢ μὴτὲν δεόμενος δι' αὐτάρκειαν οὐδὲν μέρος πόλεως ὥστε ἢ θηρίον ἢ θεός (Pol. 1253^a27–9).

⁶⁹ For speech as the distinguishing characteristic of man in Aristotle see e.g. *Rhet.* 1355^b1–2; *De int.* 16^a28–9; *Poet.* 1456^b24; *Hist. An.* 535^a27 ff. and see Clark 1975, 23–5, 37–8, 101–2. Other Greek writers, from Homer onwards, also saw language as man's unique possession—see the discussion and references in Renchan 1981; Pelliccia 1995, 25–6, 62, and *passim*; Dierauer 1977, 12, 32–4, 125–8, 234–6, 268–70. Note too the series of ancient etymologies (collected by Dickerman 1909, 25 n. 1) which derive the very word ἄνθρωπος from the faculty of articulate speech, e.g. *Etym. Magn.* s.v. ἄνθρωπος: παρὰ τὸ ἐναρθρον ἔχειν τὴν ὄπα, τούτῳ τὴν φωνήν.

enables men to form households and civic communities. Nature, which does nothing in vain (οὐθὲν γὰρ . . . μάτην ἢ φύσις ποιεῖ 1253^a9), endowed men with speech, Aristotle argues, so as to allow them to indicate what is just and unjust, good and bad. The sharing (κοινωνία) of these moral judgements, expressed through language, leads to the creation of households and a polis, the philosopher contends. In this passage from the *Politics*, Aristotle situates men between beasts and gods, and envisions three possible situations: human societies formed by men who converse with one another, a world of animals who possess no language and are incapable of forming social communities, and a realm of gods who are sufficient unto themselves and have no need of political organization. In a sense, golden age men resemble Aristotle's gods, for they have no households and no civic communities and no need for them. If speech was granted to man in order to facilitate the formation of larger social frameworks, then in the era of Kronos, where there was one all-embracing society with no boundaries between beasts, humans, and deities, language must have served a different purpose for men and animals, as well as the gods.

A Language of Emotions: Lucretius, Vico, and Rousseau

Lucretius

What was this purpose? Aristotle does allow that everyday animals can make sounds of pain and pleasure, and thus are able to communicate their feelings to one another (*Politics* 1253^a10–14) and this, in fact, may have been the function served by speech in the golden age, the sharing of feelings. Plato's choice between philosophical discourse and frivolous speech in the golden age is perhaps too narrow, for creatures in the age of Kronos could have used language to express their emotions and passions. The use of speech by both men and animals (and perhaps gods as well) to communicate their emotions and understand one another would then have contributed to the harmony of this faraway utopia. An interesting description of such an original language of emotion, perhaps the fullest description to be found in a classical text, is that furnished by the Epicurean poet Lucretius. Lucretius does not believe in an idyllic age of Kronos, but sees civilized man as developing slowly from primitive and rough beginnings and we shall look at his account below (Sect. 4.5). At the same time, the primeval man described in the *De Rerum*

Natura (5. 925 ff.) bears a certain resemblance to golden age human beings. Both groups, for example, are vegetarian, with the earth spontaneously providing their food, and both groups lack any kind of family life. Indeed, many features in Lucretius' account of the development of human civilization are a direct response to golden age myths, with the poet-philosopher both rationalizing and reacting against these tales of the age of Kronos.⁷⁰

When discussing the origin of language, Lucretius argues that man learns language instinctively or naturally: he compares a child learning to speak to a calf growing horns, a whelp growing claws, and a bird learning to use his wings. Just as animals emit different cries to express their pain, fear, or happiness, so man possessed of voice and tongue, used different sounds to express his varying emotions.⁷¹ Lucretius, then, sees the earliest form of human language as an expression of feelings, and man's first use of speech is not dissimilar to animals' use of diverse sounds to convey their various emotional responses. This kind of communication may have been quite basic in form, for Lucretius' primitive man signifies his feelings in stammering fashion, by means of cries and gesture (*vocibus et gestu cum balbe significarent* 5. 1022).⁷² Man's earliest language is composed of sounds *voces*, rather than (articulated) names of things *nomina rerum*, but these sounds suffice to denote different objects (*res voce notare* 1090; compare 1058), in addition to expressing pure emotion. While Lucretius' animals are *muta* (1088; compare 1059), that is, inarticulate,⁷³ they are not silent and perhaps we can understand that the sounds they make are more than the mere emission of noise in response to various stimuli. These sounds made by animals express their emotions and may even serve to indicate various objects, just as the sounds uttered by early man do.⁷⁴ In any event, Lucretius' primitive, expressive language of emotion, the first stage of human speech, although not situated by him in the age of Kronos,

⁷⁰ Gale 1994, 156–82 has a detailed analysis of Lucretius' account of early man in *DRN* 5. 925 ff. as a rationalization, dismissal or 'debunking' of tales of the golden age; see too Blundell 1986, 191.

⁷¹ *DRN* 5. 1028–90; esp. 1028–40, 1057–61. See Bailey's very useful commentary (1947, iii. 1486–97) on the entire passage and Snyder 1980, ch. 1.

⁷² The subject of this line is primitive men, not children—see Snyder 1980, 19 and Konstan 1973, 44–5 versus Bailey 1947, 1485.

⁷³ 'Unable to frame words', Bailey 1947, 1494 (ad 5. 1059).

⁷⁴ See Lucretius, *DRN* 5. 1056–61, 1087–90 versus 1028–9 and compare the discussions in Snyder 1980, 19–20; Konstan 1973, 45.

would be suited to a golden age, especially a simple one, where men and animals would communicate their feelings, if nothing else. Interestingly, an uncomplicated language of emotions would apparently be sufficient for Lucretius' gods as well. In the *De Rerum Natura*, deities bear a surprising similarity to beasts: both groups are self-sufficient with no need for political or social virtues. Thus Lucretius' gods, who are characterized almost solely in a negative way, seem to lack thought, speech, and action. The poet tells us that it is humans who endowed the gods with sense perception because they seem able to move and speak (5. 1161–82), but it is unclear if Lucretius himself endorses this description.⁷⁵

Vico

We find a more detailed sketch of a primeval language of emotions in the writings of later European philosophers, such as Vico and Rousseau, who thought that the original language of mankind was used to express feelings. These illuminating later discussions provide a broader perspective for Greek views. European philosophers suggested that man's original tongue was a language of emotions because they did not see how earliest man, at the very beginnings of society, could have developed a rational language, a language of thought and reason, without already possessing language. We need, they argued, words in order to refer to concepts, and concepts in order to form words.⁷⁶ Classical writers, when describing early language in the age of Kronos—rather than the first tongue of primitive man—had no need to concern themselves with the question of how such a tongue arose: it was one more golden age gift and consequently could be philosophical, emotional, or anything else, as long as it was ideal in some sense.

Vico was the first of several eighteenth-century European thinkers who contended that the original language of man was a poetic and passionate tongue, expressive rather than utilitarian, and

⁷⁵ See *DRN* 1. 44–9 = 2. 646–51; 3. 18–24; 5. 146–55; 6. 71–9 and the sources on Epicurean accounts of the gods in Long and Sedley 1987, i. 139–49; ii. 143–54. See too Nussbaum 1994, 251–9 and below, Sect. 4.5.

⁷⁶ Thus Rousseau, *Discourse on the Origin of Inequality* i (=Masters 1964, 121–2; Starobinski 1964, 147). Rousseau raises a similar problem in relation to language and society: early man can have no language because he has no society and can have no society because he has no language. See Starobinski 1988, 308–9 with 402–3 n. 17 and below, Sect. 4.5.

meant to convey feelings.⁷⁷ In his *New Science*, the third edition of which was published in 1744, Vico argues that man's language developed in three stages corresponding to three ages: the age of gods, the age of heroes, and the age of humans.⁷⁸ Earliest language, in the age of gods, was metaphorical, and expressed by means of mute acts: signs and gestures, as well as pictorial representations or ideograms. In the age of heroes, articulate speech emerged, speech which began with onomatopoeic words and interjections. These words and cries stemmed from strong emotions and were used to express them. The heroes' language still made use of metaphors, but was more symbolic. Finally, a rational and conventional language developed in the age of man.⁷⁹ In Vico's view poetry preceded prose, song came before ordinary speech, and early poetic speech made use of universal ideas. Poetic statements, 'feelings clothed in strong passions', sprang from two sources, the poverty of language and the need to explain and be understood. In Vico's analysis, then, primitive language, passions, the urge to communicate, and a poor and limited vocabulary are all linked together. Vico's primitive man is not a golden age creature, but the features he attributes to earliest language would not be out of place in a common language spoken by creatures in the age of Kronos. A universal golden age language which was both primitive and poetic, poor in vocabulary, yet rich in emotional content, would blend in well with other aspects of life at that time, for life in the age of Kronos was harmonious, but simple, even primitive according to some accounts. Once again a comparison between speech and diet in the golden age is illuminating: just as food in the age of Kronos was common to all, abundant in supply, and limited in variety, we can conjecture a limited number of simple words available to all to express their emotions.

⁷⁷ There are many other 18th- and 19th-cent. figures who discussed the origin of language and saw the first language as a poetic tongue meant to express emotions. A partial list would include Bernard de Mandeville, Thomas Blackwell, William Warburton, Étienne de Condillac, Lord Monboddo (James Burnett), James Harris, Johann Hamann, and Johann Herder. See Stam 1976, *passim*, and the brief survey of Seuren 1998, 76-9. Abrams 1953, 78-82, has an illuminating discussion.

⁷⁸ At one point (*New Science* 446) Vico inconsistently claims that the three ages were simultaneous, rather than consecutive—see Stam 1976, 16 and Simone 1998, 193-4. Marsh 1999 is a recent translation of *La Scienza Nuova*.

⁷⁹ See Vico, *New Science*, sections 32, 34, 224-31, 401, 431-2, 446-9, 456, 460-1; compare 161. Compare Stam 1976, 9-19, who discusses the background and difficulties of Vico's analysis of the origin of language and see Berlin 1976, 42-52.

Rousseau

Rousseau is probably the most influential modern figure to espouse an original poetic tongue.⁸⁰ In his *Essay on the Origin of Languages*, Rousseau postulates a primordial poetic language, close to song, which expressed men's emotions rather than their needs.⁸¹ First languages were musical and impassioned, before becoming simple and methodical (ch. 2). Primitive language, Rousseau thought, was less articulated (i.e. had fewer consonants and more vowel sounds and rhythms), had few abstract terms, and an irregular, anomalous grammar (ch. 4). Men first spoke in softer southern climates, places where their wants were easily satisfied. They spoke out of passion rather than need, so that the very first words of their language were 'love me!' Later, people in harsher northern climates used a guttural, less mellifluous form of speech and their language expressed their needs, not their feelings: their first words were 'help me!' (chs. 10-11). As time went on languages lost their melody and charm, and prose replaced poetry (ch. 19). Thus Rousseau's earliest men, like the creatures of the golden age, had no real needs, but turned to language to express their feelings. This simple language was subsequently lost, just as the common tongue of the golden age disappears. Rousseau's scheme, like that of Vico, suggests one possible way of viewing golden age men. Rather than assigning them a certain poverty of spirit, we should, perhaps, grant these early men a desire to share their feelings with other creatures, even if their verbal capacity to do so was limited. Such a language of feelings, rather than ideas, need not have been used solely in a hedonistic context, as suggested by Greek writers of comedy and by Plato in the *Politicus*. It is possible that man first used speech to express an abundance of emotions, rather than conducting nugatory conversations around an endless flow of food and drink.

If the common speech in the golden age was a language of emotions, the feelings expressed were probably gentle and amicable ones. A useful question to ask in relation to theories on the origin of language is what the first word in the primordial language would have been. This first word serves as an encapsulation of each of the

⁸⁰ Starobinski 1988, 304-22 with notes on 402-4 ('Rousseau and the Origin of Languages') is an excellent discussion of Rousseau and primeval language. See too Wokler 1995, 28-31, 33-8; Stam 1976, 80-2, 88-93.

⁸¹ Jean-Jacques Rousseau's *Essai sur l'origine des langues où il est parlé de la mélodie et de l'imitation musicale* was published posthumously in 1781, but written several decades earlier.

various glottogenetic theories, pointing to its idea of the most pressing needs or interests or emotions of the first speaking humans.⁸² Vico's early man is brutish and frightened and his earliest use of language is meant to soothe himself. Thus his first word 'thunder' is addressed to himself and is aimed at controlling a negative emotion by giving it a name, a cognitive label. Rousseau's earliest speakers are more sociable: the comfortable southern peoples begin with the request 'love me!', while those in rougher northern areas exclaim 'help me!' In the golden age, language, a fully developed language, is present from the very start, but it is nonetheless an interesting exercise to try and guess the very first word of that language. It seems likely that this word was a social overture of some kind, something like Rousseau's 'aimez-moi', rather than his 'aidez-moi', or Vico's 'thunder', for golden age creatures needed neither help nor reassurance.

Primitive and Poetic Tongues

Rousseau also discusses the origin of language in his *Discourse on the Origin and Foundations of Inequality among Men* and there his approach is rather different.⁸³ In the *Discourse*, Rousseau describes the primeval language as a crude but universal tongue. Each word had to convey an entire proposition, and subjects and objects, verbs and nouns were not yet distinguished. Early man 'did not require a language much more refined than that of crows or monkeys . . . inarticulate cries, many gestures, and some imitative noises must have composed the universal language'.⁸⁴ Here we have returned in a sense to Lucretius, for this tongue outlined by Rousseau belongs to an early and primitive stage of civilization, rather than a golden age, and man's original language is a rudimentary, beast-like form of communication. Men and animals speak virtually a common tongue, common by virtue of being so basic and primitive.

The universal language shared by men and animals in the age of Kronos could have been equally simple. Indeed, one possible view of the first, golden age language is that it was a protolanguage, a primitive language which was shared by men and animals precisely because it was so simple, and included no complex features beyond

the capabilities of beasts. Thus when men and animals speak the same language in the golden age, this may be because men are brought down to the level of animals, and are allotted similar, limited linguistic capacities. Here, then, speech or language is divided into two tiers. The lower form of communication is used by animals and primitive man (and, as we shall see below, Sect. 5.3, the deaf, young children, etc.). Sophisticated humans use a more complex tongue, which goes beyond natural language and gestures in its designative, propositional, and symbolic powers. Animals' language can be deemed lesser in several different ways: in sound, in content, and in structure. Thus we have seen that Lucretius considers animal language inchoate or inarticulate, composed of sounds (*voces*) rather than words (*nomina*), while Aristotle contends that animals have less to communicate, just their emotional state.⁸⁵ Yet a third difference is the more limited form and syntax of animal language.

Here we can turn to a hypothesis found in a late twentieth-century discussion of the origin of language. In his book, *Language and Species* (1990), Derek Bickerton argues that a very limited language ability is common to young children, adults who have been deprived of the sound of speech, and great apes instructed in language. All of these groups can use a protolanguage of words (or signs) as simple labels for things and actions. In this simple pidgin-like form of speech there are next to no inflections or auxiliary verbs marking tense or aspect, few conjunctions, pronouns, prepositions, articles, or demonstrative adjectives, limited expressive function of word order, and virtually no hierarchically complex sentences ('A. said that B. thought that . . .'). Bickerton then goes on to argue that *homo erectus* spoke a protolanguage of this kind, which need not have used articulate sounds, but could have used crude grunts and gurgles. There was, he claims, a great gap between this simple tongue and the full-fledged human language used much later by *homo sapiens*.⁸⁶ Bickerton, then, postulates a primeval language

⁸⁵ Nocentini 1992 attempts to characterize a lower-level language of emotions common to children and trained chimpanzees.

⁸⁶ See Bickerton 1990, 144–5. For an attempt to argue that the gap between protolanguage and full-fledged speech, or in Bickerton's terms the gap between pidgin and creole is not so great see Sampson 1997 and Szathmáry 1996. Compare too Steklis 1988, who attempts to narrow the gap between human speech and the language of chimpanzees. He argues that chimpanzees' calls convey more than their emotional state and include information about the sender's sex etc.

⁸² See for this paragraph the very interesting article by Trabant 1996.

⁸³ For an attempt to reconcile the divergent accounts of the *Discourse* and the *Essay*, see the references cited above, n. 80.

⁸⁴ *Masters* 1964, 145 (= Starobinski 1964, 167).

which was simple and primitive enough—in sound and structure—to be used even across species. Perhaps it was a language of this kind that was spoken by men and animals in the golden age, only to be replaced, as we shall see, by a more subtle and sophisticated tongue, Pandora's language.

Such a primitive golden age language is presumably better than the richer and more supple languages spoken by humans after the era of Kronos ended. Using our diet analogy yet again, we can argue that a simple language of this kind is parallel to the uncultivated vegetarian diet which men and animals shared in the golden age. A diet basic but available without any effort is better than richer types of nourishment which must be carefully and painstakingly cultivated. Both the simple diet and primitive language shared by men and animals involve deliberate limitations: speaking to beasts means limiting the range and richness of language while sharing a diet entails vegetarianism, or an even narrower diet, for example, of acorns. A more complicated diet means either eating animals or cultivating the land, or both; a more complex language implies excluding animals and slowly learning speech. We shall see below that there is an even stronger relation between diet and language in this harmonious world, for the fact that men speak with animals means that they do not eat them. The joint speech and common diet of golden age men and beasts are closely intertwined.

If the original golden age language was a simple tongue, ideal because it could be spoken by all the creatures of that time, its simplicity may have had other virtues as well, for a primitive language would perhaps be easy to acquire. Here it is worth looking at the ideas on the development of language held by Varro, the first-century BCE Roman writer. Varro postulates an original, simple language composed of a limited number of uncomplicated, fixed roots which could be quickly learned. Other words are then derived systematically from this fixed primitive stock, the atoms of language as it were, by means of declension, conjugation, and derivational morphology. He notes that if there were an original stock of one thousand primitive words, as many as five million different forms could be generated.⁸⁷ Varro does not expressly link this atomic

⁸⁷ Varro, *Lingua Latina* 6. 36–8; 7. 4; 8. 5. See Blank 1982, 21; Frede 1978, esp. 69; Harris and Taylor 1997, 47–59, esp. 56–9. Compare too the 1st-cent. CE grammarian Philoxenus, who wrote of monosyllabic verbs (*περί μονοσυλλαβῶν ῥημάτων*) from which all other nouns and verbs were derived. See too Augustine *De Dialectica* 6 and 10. 9 ff.

language to the golden age, nor does he discuss the way in which basic words were imposed on things.⁸⁸ Yet his concept of an original language, simple and limited, which can then be greatly expanded by regular, systematic means, provides us with a useful model. We can imagine that the original golden age language shared by all was something like Varro's basic stock of easily acquired first elements. (In the eighteenth century, Charles de Brosses will depict Sanskrit as just such an ancient and primitive language, which derived an infinite number of words from a limited number of roots.)⁸⁹ This language would have then expanded and probably been corrupted once the golden age ended and it became the sole property of one species, man. If Derek Bickerton points to more complex syntax as a crucial element in the transition from pidgin to creole, Varro, like most ancient thinkers, saw language chiefly as being composed of words and consequently was concerned with the increasing complexity and multiplication of words.⁹⁰

Poetry

According to thinkers such as Vico and Rousseau, man's first language was poetic, as well as primitive. Vico and Rousseau accept Lucretius' view of language as natural, spontaneous, and emotional, but add the claim that the first articulate form of speech was poetry.⁹¹ Lucretius himself sees poetry as one of the later developments of civilization. He has an idyllic description of rustics amusing themselves by talking and joking, playing clumsy music and dancing. The rustics learn the 'language' of music (and perhaps poetry) from animals and their sounds (*DRN* 5. 1390–1404). In Greek writers such as Plutarch and Strabo, we do find the argument that poetry is older than prose, but this claim is not linked to the

⁸⁸ See above, n. 26. See too Taylor 1975, 24–32 on Varro's careful distinction between *impositio* and *declinatio*.

⁸⁹ *Traité de la formation mécanique des langues* (1765); see Simone 1998, 213; Stam 1976, 27–8.

⁹⁰ At times, Varro goes beyond words to syntax when speaking of language. He argues that animals lack syntax and claims erroneously that the Latin word for speaking *loqui* is connected to *locus* a place and implies being able to put words in the right place. Varro, *Lingua Latina* 6. 56; see Sorabji 1993, 81.

⁹¹ Mention should also be made of the 19th-cent. thinker Charles Nodier, who in his *Notions élémentaires de linguistique* (1834), similarly assigned liveliness of expression and picturesque imagery to early language, which he saw as being both poor, i.e. having few words, and naturally poetic. See Genette 1995, 138–9 with notes on 370.

question of an original language, golden age or otherwise. Plutarch is anxious to explain why the responses of the Delphic oracle changed over the years from poetry to riddling prose, while Strabo is influenced by the fact that the earliest Greek writers wrote in poetry, rather than prose.⁹² There is no extant description in classical literature of golden age language as a poetic or musical language of emotions. Lucian, however, has a description of a kind of universal language of music, uniting all the inhabitants of a utopian world in song. In the *Vera Historia*, a parody of earlier Greek utopian works, Lucian describes an outdoors banquet held in the Island of the Blessed. A choir of boys and girls conducted by renowned poets sing and are then followed by another choir, made up of singing swans, swallows, and nightingales. The woods too make music, with the winds conducting (*Vera Historia* 2. 15). When Lucian points to music as the universal language shared by men, living creatures, and nature itself, he may be echoing or parodying an earlier Greek account.

3. HESIOD, HOMER, AND THE GOLDEN AGE

Hesiod's Golden Age

Let us turn now to our earliest source on the age of Kronos, Hesiod. While Hesiod makes no reference to animal speech, he does tell how men and gods first shared a common bond and then lost their ability to communicate with one another directly. In his description of the golden race of men, men who live without toil or grief, enjoying the good things spontaneously produced by the earth (*Erga* 109–26), Hesiod makes no mention of the language they speak. However, since these men of long ago began life on the same terms as the divine beings (*ὡς ὁμόθεν γεγάασι θεοὶ θνητοὶ τ' ἄνθρωποι* *Erga* 108)⁹³ and lived like gods (*ὥστε θεοὶ δ' ἐζώνον* *Erga* 112), we can, perhaps, assume that mortals and immortals were in close communion and spoke a common language. The poet goes on to tell of how the golden race disappeared and was followed by the ages of silver,

bronze, and iron, with a race of heroes interspersed between the bronze and iron men (*Erga* 127–201).⁹⁴ These later races spent their lives at a greater remove from the gods⁹⁵ and—in our hypothetical reconstruction of the linguistic situation—it is unlikely that these lesser races shared a common language with the gods. Hesiod gives no explanation for the disappearance of the golden race of mortals in his myth of the five ages, although we are told that the other, later races perished because of impiety, internal strife, external war, etc. In our attempt to tease out the linguistic implications of the close of Kronos' age, it is most useful to turn to the poet's account of what happened after men and gods were separated at Mekone, for Hesiod's tale of Prometheus and Pandora (*Erga* 42–105; *Theogony* 535–616) seems to supplement his narrative on the golden race. The depiction of man's lot before the separation at Mekone and of the conditions enjoyed by the golden race are very similar: both groups of men lead lives free from toil, woes, and diseases (*Erga* 90–2, 112–19), so that the account of the changes brought about by Prometheus and Pandora can be used, tentatively, to fill in what happened when the age of Kronos ended.⁹⁶ We need not assume that Hesiod intended the two stories to blend together seamlessly, and it is sufficient for our purposes that the tale of Pandora and Prometheus provides a parallel account of man's decline from an original state of happy communion with the immortals, supplying fuller details on the circumstances of that decline. We do not know what language was like before Mekone. It is possible that Hesiod's very text reflects the ease with which men could grasp reality in the time before they were separated from the gods by Prometheus' deed, for there is a great concentration of etymologies in the earlier part of Hesiod's *Theogony*. These etymologies perhaps reflect the belief that men could better understand names and what lay behind them.⁹⁷ Perhaps, then, language before Mekone was a divine, Adamic one with names reflecting reality.

In any event, Hesiod indicates that there was a division or break

⁹² See West 1978, 172–7 and Blundell 1986, 137–47 and the further bibliography there for detailed discussion of the myth of the five ages/metals.

⁹³ The men of the silver and heroic ages are, however, granted blessed lives in the next world.

⁹⁴ See Pucci 1977, 84–5 and 116 n. 4; see too Blundell 1986, 138–44 and the further references there.

⁹⁵ See e.g. the explanation of the Cyclopes' name (*Theog.* 144–5), an etymology which is not found in Homer, and see further Leclercq 1993, 150–1, 272–6.

⁹² Plut. *De Pyth. Orac.* 406b–c; Strabo 1. 2. 6. See Abrams 1953, 79.

⁹³ For this interpretation of *Erga* 108 see West (1978, 178) ad loc.; Pucci 1977, 88, takes the line to mean that men and gods emerged whole from the same place, presumably the earth, but notes (117–18 n. 14) that other scholars understand that 'the original life of men and gods was equal and common'.

of some kind between men and gods at Mekone (see καὶ γὰρ δ' ἔκρινοντο θεοὶ θνητοὶ τ' ἄνθρωποι *Mhkwñ Theog.* 535–6). The combined deeds of Zeus, Prometheus, and Pandora after that break led to a new position for man, midway between the beasts and the gods.⁹⁸ Fire, sacrifice of animals, marriage, sexual reproduction, and agriculture were all introduced to humans for the first time by Prometheus and Pandora, the bringers of culture. All of these new features of human life served to define mortal man's new situation, his distance from both gods and animals. Indeed each of the features used to differentiate men from gods is equally relevant to the opposition between men and beasts. The institution of sacrifices to the gods is perhaps the clearest instance of the consequences of this new order. Different portions of the sacrificial victim were allotted to gods and to men, who clearly no longer eat together. Human ease and closeness with the gods—expressed in part through the mortals' joint feasts with the deities—are gone.⁹⁹ After Mekone men could communicate with gods only indirectly and from afar, signalling to them with the smoke and spices of sacrifice. The sacrifice of animals at Mekone not only underlines the vast gulf between men and gods: it also points to the great divide between men and beasts. If in the golden age men were vegetarians and lived with animals in comradeship fashion,¹⁰⁰ they now made use of Prometheus' gift of fire, cooked the slaughtered animals, and ate them. Animals became, in turn, savage, eaters of raw, uncooked food and of each other, with no sense of justice.¹⁰¹

⁹⁸ See for the following paragraph Vernant 1980a; 1980b; Detienne 1981; Pucci 1977, 82 ff. See too *Σ* ad Hes. *Theog.* 535 ἐκρίνοντο τί θεός καὶ τί ἄνθρωπος ἐν τῇ Μῆκωνῃ and see Thalmann 1984, 99 with 214 n. 45. Leclerc 1993, 106–7 points out how in Hesiod, unlike Homer, mortal men rarely encounter gods directly.

⁹⁹ For men and gods dining together—in a general atmosphere of intimacy—see the Hesiodic *Catalogue of Women* (fr. 1. 6–7). Thalmann 1984, 89–92, 99–102 (and notes on 214–15) discusses the epic use of the theme of common (and separate) meals to describe the closeness (and distance) between men and gods. He sees the *Catalogue* fragment, Hesiod's myth of the metallic ages, and the Prometheus episode at Mekone, as three variations on the same theme of an original intimacy and subsequent separation between gods and men. In Homer it is only faraway, otherworldly people, isolated from ordinary mortals who feast with the gods: the Ethiopians both dine with the deities and offer them animals (*Il.* 1. 423–4; 23. 205–7; *Od.* 1. 22–6), while the Phaeacians are joined by the gods at their feast when they sacrifice hecatombs (*Od.* 7. 201–3). When Calypso and Odysseus dine together on different food (*Od.* 5. 196–9) their joint meal only points to the vast differences between them. See Vidal-Nacquet 1996, 49–50 with n. 78; Dillon 1992, 24–5; Nagy 1979, 213–18.

¹⁰⁰ For golden age vegetarianism, see below, Sect. 4.

¹⁰¹ The word *baís*, normally used only of human meals or sacrifices and meals for

The post-Mekone practice of sacrifice has several important consequences for communication and the use of language: here we see another kind of correlation between diet and speech. It seems clear that human beings, who have been distanced from the gods, and no longer eat with them, do not speak directly to them either. Just as the two groups do not share in the same parts of the sacrificial animal, they do not converse together: at best humans address the gods only at a distance, through prayer, in a one-way exchange. Nor is it conceivable that men continue to speak with animals, whom they now eat. The beasts themselves, turned savage and wild, apparently are left without language altogether. Thus men now speak a language of their own. Man's practice of eating cooked food is accompanied by—in a sense, parallel to—the use of *human* speech, while the uncooked diet of animals goes together with their 'raw' sound or inarticulate speech. We have already noted the interesting link between uncultivated diet and uncultivated speech; in a rare ethnographical digression, when describing a particularly remote and rude Greek tribe, the Eurytians, Thucydides notes that they speak a dialect more unintelligible than any of their neighbours and are believed to eat raw meat (*ἀγνωστότατοι δὲ γλώσσαν καὶ ὠμοφάγοι εἰσὶν ὡς λέγονται* Thuc. 3. 94. 5). Incomprehensible eating habits—the consumption of uncooked meat—are linked by Thucydides with barely intelligible Greek. The eating of raw meat, one stage away from cannibalism,¹⁰² goes hand in hand with indistinct speech. Animals who actually do eat one another in the world after Mekone, no longer possess any kind of articulate speech and can only utter sounds.¹⁰³

The Language of the Gods

We have arrived, then, at the world outlined in Aristotle's *Politics* (1253^a1–29; see above) with speaking humans situated between mute beasts and the self-sufficient gods. What can we say of the

the gods, points to the culinary divide between the gods and men, on the one hand, and animals, on the other. If Homeric men normally do not dine with the gods, they certainly do not eat with animals either. Feasting and justice, *dais* and *dike* associate men with the gods and distinguish them from animals: the absence of ethical rules in the world of beasts is linked to their dietary habits (see Hes. *Erga* 276–8). See too Said 1979, esp. 17–18; Rüdiger 1996, esp. 188–9; Detienne 1981, esp. 218–19; Renehan 1981, 254–6.

¹⁰² See Detienne 1981, 219; Rawson 1984; and below, Sect. 4.

¹⁰³ It is worth comparing here the account found in the book of Jubilees, a work dating to the second half of the 2nd cent. BCE (above n. 8) which supplements the

language of the gods after Mekone? What would be the linguistic equivalent of the god's diet of savour and spices, ambrosia and nectar? Such a divine language should perhaps be a silent, incorporeal language without words, if it is to be a form of speech comparable or parallel to the deities' insubstantial diet. Here we may think of the internal, non-vocal speech used by Augustine's god. Human beings hear the inner word of God (*verbum . . . quod intus lucet*) internally and the deity, according to Augustine, uses no actual language such as Hebrew or Greek.¹⁰⁴ There is also the rarefied silent language of angels of scholastic theology, as outlined by thinkers such as Thomas Aquinas and Dante. Angelic language, according to Aquinas, is essentially interior speech (*locutio interior*). One angel communicates to another by willing that his mind be made known. Dante stresses that angelic speech does not take material form through spoken words: the angels can communicate among themselves by means of spiritual reflection, without resorting to signs of any kind (*nullo signo locutionis indiguise videntur*).¹⁰⁵ Perhaps the post-Mekone gods used a similarly incorporeal language. Indeed, we find in Xenophanes the complaint that men do not recognize the uniqueness of the gods' language and assimilate divine communication to human speech. Humans anthropomorphize the gods, states Xenophanes, assuming that they were born, and assigning to them clothes and language and an appearance like their own (*ἀλλ' οἱ βροτοὶ δοκέουσι γενᾶσθαι θεούς, τὴν σφετέρην δ' ἐσθῆτα ἔχειν φωνὴν τε δέμας τε* DK 21 B14). Divine speech could well be quite different.

What of divine language before Mekone? What was the gods' language like in the era of Kronos? Did men speak the same language as well? In Homer we learn a great deal about the language of the gods, that is, the language used by deities in the era of Zeus. When Homeric gods speak to humans they almost invariably change their appearance and manner of speech before addressing mortals, taking

story of Adam as found in Genesis. Animals lose the common tongue they share with Adam, after he is expelled from Eden. After leaving paradise, Adam immediately offers spices or incense (but not meat!) as a sacrifice (Jubilees 3: 28).

¹⁰⁴ Aug. *De Trinitate* 15. 11. 20; see too *Sermones* 180. 7. 7 and the further references and discussion in Kirwan 1994, 208–10.

¹⁰⁵ See Aquinas, *Summa Theologica* 1.107 esp. art. 1 and 4; *Quaestiones Disputatae: De Veritate* qu. 9 art. 4: *dicatur angelus unus alteri loqui, manifestando ei interiorem mentis conceptum*; Dante, *De Vulgari Eloquentia* 1. 2. 1–3; 1. 3. 1. It is interesting to note how closely *DVE* 1. 2. 1–2 echoes the Aristotle *Politics* passage. See too Chrétien 1979 and Barański 1989, esp. 210 and 217.

on human form (*δέμας*) and voice or speech (*αὐδή*).¹⁰⁶ Sometimes the gods take on the appearance and voice of a specific human being, familiar to the person being visited, and sometimes they adopt a more general guise (e.g. as herald or herdsman), but the essential fact for our purposes is that they must adopt a different, human speech when communicating with mortals.¹⁰⁷ Homer also uses a special vocabulary—words such as *ῥῶσα* (voice), *θέσις* (divine), and *θεσπέσιος* (spoken by a god)—to depict divine voices and speech, referring both to the distinctive sound of the gods' voices and the unique capacities of their speech.¹⁰⁸ Gods differ from men not only in their beauty, immortality, stature, and diet, but in their speech as well.

When gods address one another—and not mortals—in the *Iliad* and the *Odyssey*, their conversations are presented, of course, in epic Greek. Homer, composing in the Greek of literary epic, has no choice but to have all his interlocutors speak the same language.¹⁰⁹ Yet, at times, Homer betrays an acquaintance with the special language of the gods. And it is this Homeric language of the gods which could have been the common form of speech shared by men and deities in the time of Kronos. Once the era of Zeus has begun, Homer, it seems, is one of the few human beings to be familiar with the language of the gods and later Greek commentators find it necessary to explain the source of Homer's special knowledge. Scholiasts tell us, for instance, that Homer was raised by the Muses, inspired by them, or simply learned divine language from them.¹¹⁰

¹⁰⁶ See Clay 1974, esp. 129 n. 1, who collects the instances of Homeric gods changing their *demas* and *aude* and rightly concludes from this that normally gods must speak differently from men.

¹⁰⁷ See *Od.* 16. 161 *οὐ γὰρ πᾶσι πάντεσσι θεοὶ φαίνονται ἑναργεῖς* and compare e.g. *Il.* 2. 790–1; 13. 216; 2. 279–80; *Od.* 13. 222–3 and the further references collected by Garvie 1994, 87 on *Od.* 6. 20–49. In the *Odyssey* both Circe and Calypso are termed dread goddesses of human speech *δεινὴ θεὸς αὐθέσσα* (Circe: *Od.* 10. 136 = 11. 8 = 12. 150; Calypso: *Od.* 12. 449) and these minor goddesses who live on earth apparently can speak in a human way; compare *Od.* 5. 334–5. See Clay 1974, 133; Ford 1992, 178 and compare Nagler 1996.

¹⁰⁸ See Ford 1992, 180–97 for an analysis of these terms in Homer and see Lecterc 1993, 41–8. Ford also discusses the powerful voices of the gods, and the anomalous, multiple voices of the monster Typho, described by Hesiod (*Theog.* 829–35). Typho, in addition to speaking the language of the gods, makes the sounds of a bull, a lion, a dog, etc.

¹⁰⁹ See above, Sect. 1.1 with n. 12.
¹¹⁰ Homer raised by Muses: *Σ b T ad Il.* 1. 403: *ὡς μουστροφῆς καὶ τοῖς παρὰ θεοῖς ἐπίσταται λέγειν*; *Σ b ad Il.* 2. 813–14 *ὡς μουστροφῆς αὐτὴ τὴν τῶν θεῶν διδασκάλου*; see too Eustathius on *Il.* 1. 403. Inspired by them: *Σ T ad Il.* 14. 291 *οἷε δὲ τὸ θεῶν εἰς τὴν Μουσῶν καταπνέμενος*. Learned from them: *Σ T ad Il.* 20. 74 *παρὰ Μουσῶν τοῦτο αἶσθη*.

In the eyes of the scholiasts, then, Homer's knowledge of the language of the gods is a reflection of the poet's status, stressing his privileged and inspired knowledge. Dio Chrysostom is more sceptical. He doubts that Homer knows more than a few words of the language of the gods (10. 23-4) and accuses the poet of lying when he claims to be able to speak Zeus' dialect (*διασσι διαλέγεσθαι* 11. 22-4).

What can we say of this tongue of the gods? There are six references altogether to divine language in Homer. In the *Iliad*, we find four instances of their speech, with Homer noting the names given by the gods to various objects—a giant, a hill, a bird, a river—and then adding the names given by men to these same things. He tells us, for instance, that a river is called Xanthus (*Ξάνθος*) by the gods and Scamander (*Σκάμανδρος*) by men. In the *Odyssey* there are two references to names of objects—a magic plant and dangerous rocks—in the language of the gods, with no parallel or equivalent form in human language.¹¹¹ What are the special characteristics of this divine language? Modern scholars, who have devoted a great deal of attention to the six instances of divine words in Homer, have offered a series of hypotheses. Homer's language of the gods is clearly part of a broader Indo-European tradition of recognizing different, hierarchical levels of language, with the semantically unmarked term assigned to men and the poetic or marked term attributed to the gods. The divine names are meant to belong to a higher, more poetic register.¹¹² It has been suggested that the words assigned to the gods belong to an older, earlier stratum of Greek, or that they are non-Greek in origin, but these suggestions hold true for only some of the words.¹¹³ We find further instances of the vocabulary of the gods in later Greek writers, such as Hesiod, Pindar, and Cratinus, but again, there is no one linguistic common denominator for these words.

Investigating the technical linguistic differences between divine names and human ones—if such differences exist—is less fruitful for our purposes than trying to understand what is specifically unique and divine about the language assigned by the Greeks to the

¹¹¹ *Il.* 1. 403; 2. 813-14; 14. 290-1; 20.74; *Od.* 10. 305; 12. 61. Güntert 1921, esp. 80-130, is the classic study of the language of the gods; Bader 1989, esp. ch. 3, is a fairly recent study with a full bibliography on earlier work.

¹¹² See further Watkins 1970 and 1995, 38-9, 181-2. West 1997, 352-3 notes some Near Eastern parallels for a language of the gods.

¹¹³ See Kirk 1985, 94-5 (ad *Il.* 1. 403-4); Janko 1992, 196-7 (ad *Il.* 14. 290-1); Edwards 1991, 297-8 (on *Il.* 20. 73-4); Clay 1972, 127 with n. 2.

gods. Here too scholars are divided. While it has been argued that the language of the gods is simply their individual tongue, analogous to the different languages used by different societies of men and animals, other modern commentators think that divine speech is a language fuller and richer than the speech of mortals, which excels human language in its power to express everything in the world, including matters beyond human ken. There is a distinct boundary between what men and gods can know, scholars contend, and gods apparently have a language of their own to accommodate their higher wisdom.¹¹⁴ Ancient evidence confirms this latter view, for it seems clear that for the Greeks, the language of the gods somehow reflects their higher, divine status. We have already seen that Plato, when discussing divine speech in Homer, notes that the gods speak a correct language, calling things by their natural names which reveal their essences, while men do not (*Cratylus* 391d2-e3). Plato's divine language is an Adamic tongue, where names bear an intrinsic relation to things, so that here the gods' language is a function of their superior knowledge.¹¹⁵ Scholiasts commenting on the Homeric references to divine names assign a variety of unique qualities to the language of the gods. They state that Homer assigns the gods a more perfect vocabulary, more accurate forms, better sounding words, or the true names of objects, rather than their common ones.¹¹⁶ (Here we should notice, incidentally, that the language of the gods is composed solely of nouns.)¹¹⁷ Eustathius, the twelfth-century commentator on Homer, wishes to place the gods' discourse on a higher plane: he terms their language more solemn, noble, and stately.¹¹⁸ In Orphic writings, the distinction between the language of gods and men becomes a distinction between common language and mystical speech.¹¹⁹

¹¹⁴ See West 1966, 387 (ad Hes. *Theog.* 831; contrast West 1997, 352-3) versus Clay 1972 and Ford 1992, 180-9.

¹¹⁵ See *Cratylus* 400d6-9 (and above, Sect. 1); see Baxter 1992, 112.

¹¹⁶ See *Σ* b T ad *Il.* 1. 403: τὰ τελειώτερα θεοῖς ἀντιθέσθαι; *Σ* T ad *Il.* 20. 74: τινὲς δὲ τὰ εὐφραδέστερα φασὶν αὐτὸν περιθέσθαι (τοῖς θεοῖς); *Σ* T ad *Il.* 14. 291: τὸ εὐφρονος ὄνομα τοῖς θεοῖς τίθησιν; *Σ* b ad *Il.* 2. 813-14: τὴν μὲν δημιωδέσσαν ἀνθρώποις, τὴν δὲ ἀληθὴ θεοῖς προσάπτει.

¹¹⁷ Bader 1989, 256-7 sees this exclusively nominal character as an expression of the attempt to apprehend the mysteries of the universe by naming them. But perhaps these nouns reflect the view of language as simple nomenclature.

¹¹⁸ Thus Eustathius on *Il.* 1. 403: εὐγενέστερον . . . καὶ σεμνότερον ἐνὶ δὲ καὶ ὀγκρότερον εἰς φωνήν.

¹¹⁹ See frs. 83 and 91 Kern and compare Gambarara 1984, 109.

These attributes assigned by various Greeks to the language of the gods—a perfect, true, accurate, euphonious, or majestic tongue—express different ideas on the characteristics of an ideal language. They serve as an interesting indication of what different Greeks saw as the limitations or failings of their own lesser human language: it is precisely in those areas in which the language of the gods excels that we should understand that the Greeks felt dissatisfied with their own tongue. Each and every one of these model qualities attributed to the language of the gods would be well suited to a golden age language, a language supposedly used by gods and fortunate mortals alike.

We have seen that the most notable linguistic feature of the age of Kronos is the universality of speech and the lack of linguistic barriers. This Greek dislike of obstacles between speakers of different languages is also apparent from the fact that the gods of the post-Mekone world are said to know all human languages. Indeed, in the earliest reference in Greek literature to actual linguistic obstacles, we find the goddess Aphrodite, who is disguised as a mortal, inventing excuses for the fact that she is bilingual in both Trojan and Phrygian (*Homeric Hymn to Aphrodite* 111–16). After the golden age is over, gods retain their ability to communicate with everyone, even if men are no longer able to do so. Mortals could perhaps be comforted by the fact that their primeval forefathers may have shared the gods' special, ideal language in the golden age.

Women as First Speakers

Returning to Hesiod's text, we can learn more about linguistic conditions after Mekone.¹²⁰ Pandora is, it seems, the first to possess a mortal tongue, a language which is known as human speech. When Zeus orders the various gods to participate in the making of Pandora, he instructs Hephaestus to place human speech inside her (*ἐν δ' ἀνθρώπου θέμεν αὐδὴν Erga* 61). Hermes will subsequently give Pandora a voice (*ἐν δ' ἄρα φωνὴν θῆκε θεῶν κήρυξ Erga* 79–80), together with lies and deceitful tales.¹²¹ What is this *human* speech

¹²⁰ See Pucci 1977, 88–99, esp. 89–91; Leclerc 1993, 119–29.

¹²¹ Commentators, ancient and modern, disagree as to the exact distinction between *αὐδή* and *φωνή*, but Clay 1974 and Ford 1992, 177–9 demonstrate convincingly that *αὐδή* is used in epic of humanly intelligible speech, while *φωνή* is more generally 'sound': see too West 1978, 163–4 (ad *Erga* 79); Leclerc 1993, 44–7, 122–4. It is not clear why both Hephaestus and Hermes are involved in giving voice to Pandora, although each of the two deities elsewhere grants speech to others; see

(*ἀνθρώπου . . . αὐδὴν*) granted to Pandora? If we assume that until the division at Mekone men spoke the same language as the gods,¹²² Pandora now comes to mankind equipped with a form of speech which is specifically human and intended for men. This language is apparently new, created especially for Pandora—who will then transmit it to men—and implanted in her by Hephaestus.¹²³ Pandora brings countless woes and diseases to mankind (*Erga* 94–104), all of which worsen man's lot and underline the great gulf which has been opened up between gods and men, and the new language she bears is apparently one more such bane. Human beings will now speak a separate language of their own, introduced by Pandora, the carrier and transmitter of evils. The inability to converse directly with gods (or with animals) and a language used only by men and women is, Hesiod implicitly tell us, a punishment, akin to the new and distressing phenomena of illness and old age. In an ideal world there is a common language, used by mortals and immortals alike.

If the very fact of a separate tongue for mortals is an evil in and of itself, Hermes' contribution to Pandora, his addition of deceit and wheedling words (*ψεύδεά θ' αἰμυλίου τε λόγους Erga* 78), may point to further negative developments related to speech introduced by the first female. The language of the age of Kronos would have been without lies or deception due to its transparency; there would also have been no reason to use such tactics in those idyllic times. Why would anyone need—or want—to lie when living in a paradise?¹²⁴

below, Sect. 4.1. Compare the tale of Aesop (*Vita* G 7), who is given the power of speech itself (*φωνή*) by Isis, while the Muses give him the ability to use speech skillfully—see below, Sect. 5.3.

¹²² Pucci 1977, 91 suggests that the common tongue spoken by both men and gods before Mekone was the language of the gods, but ignores the question of animal speech. If the pre-Mekone mortals, like the men of the golden age, conversed with animals as well, we must assume that all three groups spoke the language of the gods.

¹²³ It is perhaps misguided to ask who actually invented this human language. Could it be Hephaestus? Elsewhere he grants speech to his lifelike golden female attendants (*Il.* 18. 417–20) and, indeed, even the monsters fashioned by Hephaestus for Pandora's crown seem to be creatures with voices (*ζωοίων έκούσα φωνήων Theog.* 584). But that is not the same as inventing a language and his skills are along different lines, more magical and mechanical; compare Pelliccia 1995, 90–2.

¹²⁴ Here it is worth comparing the Houyhnhnms of Swift's *Gulliver's Travels*; see Stam 1976, 57–9. Stam notes that these imaginary, rational horses had few words because they had few needs. They had no disagreements, did not find it necessary to argue or analyse, were incapable of lying, and could not understand the mendacity of supposedly civilized Yahoos.

After Mekone, once man's life became much more laborious and difficult, deceptions could, of course, lead to tangible material benefits. Thus Pandora, equipped with her internal and external 'gifts', may have led to men using lies for the first time, in addition to causing them to adopt a new tongue. Here we are reminded of the views of Bernard de Mandeville (1670–1733), who in his *Fable of the Bees* states that man developed language in order to persuade others, often by deceit and manipulation, to help him in the pursuit of his own interests.¹²⁴ If this interpretation is correct, we can extrapolate backwards to the idyllic times before Pandora and perceive that an innocent or pure language, a discourse without lies and deceit, was another feature of the golden age which was subsequently lost to mankind.

When a golden age ends it need not mean that all its various cultural features simply disappear, but the end of the idyllic era does imply that man must now apply considerable effort in order to continue to enjoy these resources. After the changes brought about by Prometheus and Pandora, human beings had to invest a great deal of labour in order to receive much smaller returns. So, for example, men could have corn, as before, but in place of the great bounty effortlessly granted them they now had to expend much energy for a small crop.¹²⁵ A lessening of linguistic capability after the age of Kronos is in accordance with this scheme. Humans continued to use language, as they had spoken before, but could no longer converse with the gods (or with animals). And—because of the deceit and wheedling words placed in Pandora—human beings could no longer rely upon language being limpid, transparent, or truthful. Speech after Mekone contained a great many lies, and men now had to invest a great deal of effort and ingenuity to examine and untangle the words of others. One further difference may have been that human beings now had to devote time and exertion to learning a tongue, whereas in the golden age language was granted to them effortlessly, perhaps at birth.

It is undoubtedly significant that Pandora, the bringer of evils—including deceptive language—is a woman. Women's speech was thought to be particularly crafty, seductive, and dangerous.¹²⁷

¹²⁴ Mandeville in Kaye 1924, ii. 288–90; the *Fable* was completed in 1723. See Stam 1976, 37–8 with 268 n. 15, who points out that Swift and Oliver Goldsmith also share this 'nearly unique' idea.

¹²⁵ See Blundell 1986, 143–4.

¹²⁷ The outstanding mythological instance is of course that of the Sirens; compare

Pandora is often compared to another first woman, Eve, and it is interesting to find in Dante the claim that Eve is the very first speaker in the Bible (*De Vulgari Eloquentia* 1. 4. 2–3). Dante—who clearly distorts the biblical text by ignoring earlier instances of Adam speaking—then goes on to argue that it is unlikely that so excellent an act of the human race should have proceeded first from a woman rather than a man.¹²⁸ If in Dante speech is too positive an attribute to have originated with a woman, in Hesiod, slippery human language is well suited to the first woman, an initiator of troubles. One modern account of the origin of language also sees women as the first speakers, suggesting that a coalition of women secretly created speech to collectively deceive men.¹²⁹ Another modern theory suggests that language—a fully developed language with complex syntax—arose as the result of a genetic mutation affecting a single female living in Africa, an 'African Eve'.¹³⁰ Both these latter theories are controversial, to say the least, but it is fascinating to see just how tenacious the idea that a female was the first possessor of language can be.

4. ANIMALS IN THE GOLDEN AGE

Golden Age Vegetarianism

If the innovations introduced by Prometheus and Pandora established man's status and fixed his position midway between gods and beasts, this underlines the fact that prior to these changes, boundaries between the three groups were much more fluid and open. What sort of relationship did these men of long ago have with animals? Here, too, the issues of diet and speech are both related and significant. (Our tongue, as Aristotle reminds us, is used for two purposes—for tasting and for speech.¹³¹) A diet of cooked food and

the way *δόλοσσα* alternates with *αὐθῆσσα* in the description of Circe and Calypso in Homer (*Od.* 7. 245; 9. 32) and see Nagler 1996, 147–9 with n. 19. See further below, Sect. 5.3.

¹²⁸ Adam speaks at Genesis 2: 20 (naming animals) and 2: 23 (recognizing and naming woman), before Eve's address to the serpent in Genesis 3: 2–3. Trabant 1996, 45 argues that Eve is the first speaker in a biblical *dialogue*. See too Barański 1989, esp. 221–2, who collects a series of pre-Dante misogynist views on women's inferior linguistic capacities found in writers such as Paul, Jerome, Aquinas, etc.

¹²⁹ See Beaken 1996, 106–7, who refers to a theory formulated by Chris Knight; see too Klawans 2000, 34–6.

¹³⁰ See e.g. Bickerton 1990, ch. 7 and see the rebuttal in Sampson 1997, 65–70.

¹³¹ See Arist. *De Part. Anim.* 659^a34; *De Anima* 420^b16–18.

the use of language are two cultural features which normally serve to distinguish humans from animals.¹³² When animals are able to communicate with men in the idyllic age of Kronos, apparently using the same language, this not only points to the harmony prevailing between the two groups, but also indicates that beasts and men are perceived as being essentially alike. They do not belong to two different world orders or species. Time and again, Greek thinkers stress man's unique possession of speech as a quality which distinguishes him from other creatures, so that when writers on the golden age bestow language upon animals they are assimilating these creatures to men. The fact that men and speaking animals are placed on the same level or order of creation in this idyllic world implies, in turn, the practice of vegetarianism in the golden age. One simply does not eat one's friends or conversational partners. Indeed, arguments by Greek thinkers on the morality of eating animal flesh often focus upon the question of animal sentience and intelligence, and more particularly on their capacity for speech. Thinkers who favour vegetarianism contend that animals possess speech of a kind, while those who justify man's right to be a carnivore argue against animals' syntactic capacities.¹³³ Other proponents of vegetarianism point to the amity, kinship, or common sense of belonging (*συγγένεια* or *οικειώσις*) found between men and animals which should not allow men to kill animals.¹³⁴ Certainly such harmony and kinship were present in the golden age and would seem to preclude the consumption of meat.

More significantly, if men and animals in the age of Kronos belong to the same class or order, the consumption of beasts by men would be equivalent to cannibalism and cannibalism cannot, of course, be a part of an idyllic golden age. Cannibalism is sometimes

¹³² Compare a different system of distinguishing between men and beasts found in Jewish rabbinic sources: 'Six things are said of human beings. In regard to three they are like ministering angels . . . they have understanding . . . walk erect . . . and talk in the holy tongue . . . In regard to three they are beasts . . . they eat and drink . . . propagate . . . and relieve themselves like beasts' (Babylonian Talmud *Hagigah* 16a and *Genesis Rabbah* 8: 11).

¹³³ See in particular, Plut. *De Esu Carn.* 994d-e; *De Soll. Anim.* 959f-963f; Porph. *De Abst.*, esp. 1. 13-25; 3. 1-7, and the further references in Sorabji 1993, 80-6, with nn. 19-32. See too Dombrowski 1987 and Tsakourakis 1987, esp. 383-6.

¹³⁴ Pythagoras and Theophrastus are two (relatively early) thinkers associated with this argument—see Iamblichus, *VP* 168-9; Porph. *De Abst.* 3. 25 and 2. 22 (=Theophrastus frs. 531 and 584a Fortenbaugh). Pythagorean vegetarianism should, of course, be linked with the theory of transmigration of souls. See too Sorabji 1993, ch. 10, esp. 131-3; Tsakourakis 1987, 373-4.

present in the alternative model of early society, that of bestial men who gradually progress to civilization. Culture heroes, such as Orpheus or Isis and Osiris then put a stop to this allelophagy, raising humans to a higher level of civilization.¹³⁵ It is worth noting, incidentally, that cannibalism is a feature found, at times, in the age of Kronos, for Kronos' era, like the god himself, has a darker side in many ancient sources. Kronos—his myth and rituals—is riddled with oppositions: if freedom and abundance are one side of a world without clear boundaries and an ordered hierarchy, the other side is one of chaos, anarchy, and the absence of moral standards.¹³⁶ The post-Mekone divisions which introduce boundaries and limits, separating men, gods, and beasts, also lead to order, regulations, and careful distinctions.

These distinctions do not exist in the golden age. Both the practice of vegetarianism by human beings, and the use of language by animals, erase the differences between men and beasts in the age of Kronos, but in rather different ways. A common tongue with animals points towards a higher joint form of civilization, while a mutual abstention from meat can be interpreted more variously. When animals are granted speech, they are raised up, as it were, to man's level: in the idyllic world of the golden age, the difference between the two species is eliminated by elevating animals to users of language. Even if we imagine that this common tongue was a primitive, limited language, animals' capacities are nonetheless enhanced. When men are vegetarians and do not eat meat they are again placed, in a sense, on the same plane as animals, for the latter do not consume cooked food, but this resemblance between men and beasts is more complex and less obviously ideal. In the context of the age of Kronos, the practice of vegetarianism need not mean that men are more bestial: they are simply closer to animals and live in harmony with them, without consuming their fellow creatures. In other accounts of human civilization, however, man's abstention from meat was interpreted as a descent down to the level of beasts. Vegetarians, at least those who subsist on uncooked herbs and fruits, do not make use of human beings' superior technological

¹³⁵ Orpheus: fr. 292 (Kern). Isis and Osiris: Diod. 1. 14. 1 etc.; see too Athenio fr. 1 K.-A. and below, Sect. 4.4. See Renehan 1981, 255-6; Detienne 1981; Blundell 1986, 214-15, 223-4; see too Pelliccia 1995, 78-80. Segal 1981, 29-42 is a particularly helpful analysis of the cultural implications of cannibalism.

¹³⁶ See the interesting discussion of Versnel 1987 and the references there.

skills, their ability to use snares and control fire, so that people who practised vegetarianism were thought to lead a primitive and bestial life. Porphyry knows the argument that early human beings—and the reference may be to golden age men—abstained from meat because they did not know how to use fire. Thus vegetarianism is often attributed to the very first men from two different standpoints, one positive and one negative. In golden age tales, men are generally vegetarians because they live in peace and harmony with animals, while those who believe in humankind's gradual progress towards civilized life, see an uncooked diet as part and parcel of primitive man's animal-like existence. Indeed, according to some Greek thinkers it is precisely the distance which man has traversed from his primeval bestial state which allows him to consume animals. We have already encountered the claim by Hesiod that while Zeus has given justice to men, animals lack this quality: fish, wild beasts, and winged birds eat one another, since they have no justice (*Erga* 276–8). Stoics will argue that by not eating animals, men reject this unique quality of justice granted to them and become bestial themselves.¹³⁷

Here it is worth noting the Cynic identification with golden age practices. The Cynics deliberately adopted a lifestyle allegedly consistent with the animal-like conditions found in the age of Kronos. In the Cynic view the lack of boundaries and categories in Kronos' time meant that gods, men, and animals all lived as beasts, and they tried to emulate this original way of life, particularly in relation to sex and diet. Thus the Cynics opposed regulated family life and defended incest, as well as sex in public. Their diet was raw rather than cooked, which meant that they were either vegetarians or else ate raw meat (and even defended cannibalism).¹³⁸ Yet when it came to speech there is no evidence that the Cynics deliberately turned their backs on human language, substituting animal sounds instead. Perhaps this was one human capacity they were unwilling to reject or perhaps they believed that golden age animals spoke, although no extant source on the Cynics hints at this assumption.

While the presence of talking animals in the golden age implies that men of that time abstained from meat-eating, the converse is

not always true. Vegetarianism in the age of Kronos is not sufficient cause to presume animal speech as well, for abstinence from meat need not imply an egalitarian attitude towards animals. We shall see that vegetarian golden age men could—and did—make use of animals in ways which often seem to discount the possibility of the two groups speaking to one another. Yet since vegetarianism is a necessary—but not sufficient condition—for animal language, it is worth noting which accounts of the golden age expressly mention man's abstinence from meat and then examining the role assigned to animals in these tales.¹³⁹

Animals and Humans

In Hesiod's *Erga*, the first surviving account of a golden age, it is the strong and grim bronze race of men who do not eat bread and presumably are the first race to eat meat instead (οὐδέ τι σῖτον ἤσθιον, ἀλλ' ἄδάμαντος ἔχον κρατερόφρονα θυμόν *Erga* 146–7). Did Hesiod's golden age men possess or use domesticated animals? One verse in the *Erga*, line 120, does describe golden age men as rich in flocks (ἀφνειοὶ μῆλοισι), which would mean that men of the time kept animals, and perhaps made use of beasts in some way. This line, which is absent from most of the manuscripts of Hesiod, is omitted by many editors of the *Erga*.¹⁴⁰ Alexandrian scholars considered the verse spurious, apparently because they thought that raising flocks belonged to a later stage of man's cultural development; indeed flocks of sheep appear later in the myth of races, in conjunction with the race of heroes (*Erga* 163).¹⁴¹ Perhaps the verse should be discounted not because golden age men were too primitive or backward to keep beasts, but because they were too friendly with animals to use them in that way.

We shall see, however, that some writers do envision a golden age in which men live in harmony with animals and nonetheless make use of them. Indeed, a similar situation is found in Plato's *Republic* (369a–372d), in the first and simplest city outlined by Socrates and

¹³⁹ For golden age vegetarianism, see Gatz 1967, 165–71, esp. 166 and the further bibliography there. Gatz suggests that such abstinence was not an original feature of the golden age, but was added only later, under the influence of Orphic and Pythagorean practices.

¹⁴⁰ West 1978, 181 (ad loc.) notes that the verse appears only in Diodorus Siculus' quotation of Hesiod's text (5. 66. 6) and is not found in the manuscripts.

¹⁴¹ Rosenmeyer 1957, 282–3; see Cole 1967, 2 n. 4 who points to this as an example of changing attitudes towards progress. See too Anttila 2000, 162–3 on ἀφνειός and ἀφροσύνη in the hunting and gathering society.

¹³⁷ See Porphy. *De Abst.* 1. 4, 13 and Blundell 1986, 75; Detienne 1981, esp. 218–19.

¹³⁸ See e.g. Diog. Laert. 6. 72–3 and the further references collected by Lovejoy and Boss 1933, 117–52. See too Blundell 1986, 214–15, 223; Martin 1997; Vidal-Nacquet 1986, 290.

Ademantus. The citizens of this projected city lead a plain and contented life, reminiscent in many ways of the golden age, and while they make use of animals for ploughing, conveying, and clothing, they themselves subsist on a vegetarian diet. Their lack of fish and meat (*ῥέον*) is one of Glaucon's chief complaints against this simple 'city of pigs', so that when Socrates goes on to describe a second, more sophisticated and comfortable city, he makes sure to include hunters and swineherds to guarantee a meat diet (*Rep.* 372d–373c).¹⁴²

In Crates' fifth-century comedy, *Beasts* (*Θηρία* fr. 19), which is set in the age of Kronos, we find both talking animals and a limited sort of vegetarianism. Crates' animals speak freely with humans, urge men to refrain from eating their flesh, and suggest a diet of vegetables and fish instead. Empedocles describes a golden age where Kypris, that is, Aphrodite—and not Kronos—rules. The goddess is offered paintings of living creatures (*γραπτοῖς τε ζώοις*) and scented spices, rather than blood sacrifices, and men of the time are vegetarians (DK 31 B128). Beasts and birds are on good terms with humans: docility, gentleness, and affection characterize their relations (B130: *ἦσαν δὲ κτῖλα πάντα καὶ ἀνθρώποισι προσσπνῆ θήρες τ' οἰωνοὶ τε, φιλοφροσύνῃ τε δεδῆει*). Empedocles does not actually state that men and animals spoke to one another in this age of Aphrodite, but the friendship between them certainly allows that possibility. Indeed, this passage of Empedocles is thought to have been a strong influence on Plato's myth of Kronos, and the latter philosopher's talking animals.¹⁴³

Aristotle's pupil, Dicaearchus, writing a cultural history of Greece, the *Life of Greece* (*βίος Ἑλλάδος*) at the end of the fourth century BCE, also describes a golden race of men. These men lead peaceful, simple, and happy lives—they have no wealth, do not keep animals, and eat no meat. Dicaearchus presents a rationalized, 'scientific' version of Hesiod's myth of the ages, but leaves out all reference to the golden age flocks of *Erga* 120, although he quotes the verses immediately preceding, *Erga* 116–19. This is not by chance. According to Dicaearchus, men began to domesticate animals and kill them at a later stage, when they became pastoral

nomads. The exploitation and domestication of animals then leads to the accumulation of property, to jealousy and rivalry, and to the waging of wars. Their abstention from living things was, it seems, one of the factors which contributed to the happiness of men during the age of Kronos, according to Dicaearchus, so that speaking animals *could* have featured in his work.¹⁴⁴ Porphyry, whose treatise in favour of vegetarianism *De Abstinencia* is our source here for Dicaearchus' words, stresses the links between wrongdoing to animals and the evils of a post-golden age: war and greed.¹⁴⁵

The third-century BCE poet Aratus also includes golden age vegetarianism in his account of the races of men. In his astronomical poem, the *Phaenomena* (96–136), Aratus tells of the star Virgo or Justice who, in times of old, met men and women face to face and spoke to them. Men used oxen and the plough in the golden age to provide themselves with food. In the following, silver age, Justice came to earth less often, mainly to reproach humans for their evil ways. Finally, in the bronze age, Justice left earth altogether and ascended to heaven, while men forged swords and ate oxen for the first time (131–2). Aratus' version of the myth of the races is interesting for its more gradual transitions and less clearly defined boundaries between men, gods, and animals. Unlike most authors, Aratus already includes women as members of the first, golden race (line 103). The goddess Justice withdraws gradually, step by step, from humankind and there is no abrupt separation between men and the goddess as at Mekone. Thus Justice talks to the silver race as well as the golden one, although it is clear that she speaks more freely and in a more kindly way to the earlier group. Since the picture is one of the goddess addressing human beings, rather than a joint conversation or exchange, it is perhaps wrong to imagine either race—the golden or silver—actually speaking the same language as the gods or conversing with divine beings as equal partners. The impression one receives is that an all-knowing Justice speaks to human beings in their tongue, but they do not share in her divine speech. Aratus, like Dicaearchus, clearly links the consumption of meat with the beginning of war and bloodshed and assigns the end

¹⁴⁴ Dicaearchus fr. 49 W. (=Porph. *De Abst.* 4. 2. 1). See Lovejoy and Boas 1935. 93–6; Guthrie 1957. 74–7; Blundell 1986. 153–4; Vidal-Nacquet 1986.

¹⁴² See Adam 1905. i. 92–100 on *Rep.* 369b–372d.
¹⁴³ See Balaué 1997; Gatz 1967. 155–6—he compares *Law* 678e. More generally, Plato seems influenced by Empedocles for the cycles of his myth—see Guthrie 1995. ii. 248–9; 1978. v. 194; Blundell 1986. 147 ff.

¹⁴⁵ Although Porphyry 'had a vegetarian axe to grind' (Blundell 1986. 153), it is wrong to doubt the attribution of golden age vegetarianism to Dicaearchus. Compare Jerome's testimony *nullum comedisse carnem* (fr. 50 W.) and see Blundell 1986. 153–4; Guthrie 1957. 137 nn. 14–15.

of vegetarianism to the third and lowest group of men, the bronze race. Yet, in his account, animals are utilized from the very start, for the golden race use them for ploughing. While there seems to be a kinship of sorts between these men and their oxen—as a scholiast points out, the epithet 'ploughing' used to describe the animals slaughtered by the bronze age men (βοῶν . . . ἀροτήρων 132), makes their consumption all the more heinous¹⁴⁶—it seems unlikely that these oxen chatted with their masters. Despite the vegetarianism found in Aratus' account, it seems that neither men nor animals had special linguistic abilities in the golden age.

Finally, two passages from Roman writers. Virgil's fourth eclogue, telling of the return of the world to the golden age, furnishes an interesting instance of a situation where animals live in harmony with one another and with human beings, and are at the same time utilized by men, happily providing them with milk and wool. In Virgil's ideal future time, goats will approach men of their own accord to be milked and herds will not fear lions (*ipsae lacte domum referent distenta capellae ubera, nec magnos metuent armenta leones* *Ecl.* 4. 21–2). At the culmination of the perfect time envisioned by the poet, each land will produce all things and the ploughman will be able to free oxen from their yoke. But animals will still serve man, for sheep will grow their wool in many colours to spare men the effort and deceit of dyeing (*nec varios discet mentiri lana colores* 42). Thus, even in this best of all possible worlds men will still make use of animals, but the animals will cooperate voluntarily, of their own free will (*ipse . . . sponte sua* 43–5). Such cooperation by these golden age beasts will improve not only man's material situation, but his moral worth as well. It is but one small further step to imagine Virgil's kindly beasts actually addressing their masters and urging them to proceed with milking or shearing. Yet the tone of Virgil's eclogue is uplifting and having golden age animals allegedly address men and beg to be used would perhaps be too close to comic parodies of utopian times where various creatures beg to be eaten (above, Sect. 1).

Ovid describes the golden age twice in his *Metamorphoses*, once reworking the myth of metallic ages as found in Hesiod and Aratus (*Met.* 1. 76–215), and once telling of only two ages, the primitive

¹⁴⁶ Σ ad Aratus, *Phaenomena* 132: μικρὸς δὲ ὀνειδίζει αὐτοὺς καὶ μέμνεται ὡς ἀφραγμῶν αὐτῶν πρῶτον κρεβοῦσθαι, τῆς προτέρας γενεᾶς οὐ τοῦτο ἐργασαμένους. προσκείμενον δὲ καὶ τὸ ἀροτῆρων ἐπὶ προσμύθαις αὐτοῖς.

golden one of Saturn-Kronos and the latter-day unhappy age of Zeus (15. 1 ff.). When telling of the two ages, Ovid has Pythagoras urge men to refrain from eating meat and praise the peaceful vegetarian golden age when birds, hares, and fish all lived in safety (15. 96–102). In his other account of the golden age, Ovid again stresses that men were vegetarians (1. 101–18), but it would probably be wrong to assign to Ovid's age of Kronos a language common to men and beasts. The primeval man described by Ovid is far superior to the animals who surround him and is meant to rule over them. Capable of lofty thought, fashioned in the image of the gods, standing erect and gazing at the stars (1. 76–86), these original men were more likely to have conversed with gods than animals.

This brief survey of the role played by animals in various accounts of the golden age indicates that while relations between men and other creatures were invariably peaceful, with men apparently abstaining from the consumption of their fellow creatures, humans were nonetheless often in a position of superiority to animals. Frequently the question of a common language between men and animals simply does not arise and the two species do not seem close enough to communicate directly with one another. (Here, then, the very useful analogy between diet and language does not apply: sharing the same vegetarian diet does not necessarily entail sharing one form of speech.) At the same time it is in those very accounts of the age of Kronos where men seem superior to animals (Hesiod, Aratus, Virgil, and Ovid) that they also seem fairly close to the gods, so that a joint language shared by men and deities does not seem impossible. Babrius' picture of a form of speech shared by gods, men, and animals in the golden age is, as we have seen, the exception, not the rule: normally these first men either speak with gods or else share a language with animals.

None of these ancient accounts of the golden age touches upon the question of the origin of the language used at that time. While no surviving writer on the golden age explicitly says so, it seems that the beneficent gods of that time freely granted language to all. Language was simply *there*, present at the starting point, and speech seems to be one more gift from the gods in that golden era. Just as the earth spontaneously produced food for all living things, language apparently arose of itself, naturally, to be used by all. The shared language of the golden age did not have to be constructed or

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developed, just as the earth did not have to be sown or ploughed. Words and food were there for the taking. Indeed, it seems likely that speech also arose spontaneously *within* men themselves (and in other speaking golden age creatures), and that no one had to exert any effort to learn this common tongue. Perhaps men, arising or created out of earth—fully mature in some golden age accounts—possessed language from the very first moment of their existence. With the end of the age of Kronos and the advent of Pandora and her gift of a human, deceitful tongue, communication was no longer effortless and humans, it seems, had to acquire language slowly and carefully, just as they do today.

We have already noted that the language used in the golden age need not have been an Adamic one, with words reflecting the meaning of the objects they denominate (above, Sect. 1). At the same time it may have been ideal or perfect in other ways. If Pandora brings a more opaque and deceptive human language, perhaps we should understand that the primordial golden age language was one without ambiguities or complexities, a form of transparent speech which all could understand. Modern writers of dystopias favour the construction of such a simple and comprehensible language, for it seems to exclude the possibility of expressing new or subtle ideas. A simple, transparent language with no ambiguities and nothing left open or unnamed, preserves and safeguards the institutions of these dystopias. A perfect 'frozen' language does not leave room for reflecting change or new developments.¹⁴⁷ Such a language would be well suited to an unchanging society such as the golden age—for change can only be for the worse—where there would be no need for new words or concepts. Just as men are nourished by a steady diet of the same food in the time of Kronos, they could use the same limited supply of words over and over again.

All this is, of course, speculation. Ancient sources make it clear that above all it was the *linguistic community* which was ideal in the golden age, for its end led to a separation between gods, men, and beasts, and an end to their common language. Our three main sources, Babrius, Plato, and Hesiod, point to different aspects of language in Kronos' era. Babrius emphasizes the universality of this

¹⁴⁷ See Passmore 1970, 272–3, who cites Orwell's 1984 and Havel's *The Memorandum*. He notes that H. G. Wells, in his *A Modern Utopia*, has the inhabitants use an internationally comprehensible, but imperfect tongue, one that could reflect change.

first language, Plato notes its two-sided potentiality for trivia or for philosophy, while Hesiod stresses its limpidness and lack of deceit. If the age of Kronos implies effortless communication between men and gods or men and animals or all three groups, its close means the erection of linguistic barriers between the various species. The Greeks do not bemoan the lack or loss of a universal human language, as in the biblical tale of the Tower of Babel, and this may be because they rarely looked beyond their own Greek tongue to speakers of other languages. Instead they look back with longing to an era in which men could speak to gods and beasts. In Greek eyes, a language limited to humans represents a fall from grace, an expulsion from Eden.

3

Psammetichus' Children

What experiments would be necessary in order to come to know natural man; and how are these experiments to be performed within society? . . .

Let us, begin, therefore, by setting all the facts aside, for they do not affect the question. The inquiries that can be pursued regarding this subject must not be taken for historical truths, but only as hypothetical and conditional argument, better suited to illumine the nature of things than to show their true origin.

J. J. Rousseau, *Discourse on Inequality*

1. THE EXPERIMENT AND ITS BACKGROUND

Herodotus tells us that when the Egyptian king Psammetichus (664–610 BCE) wished to determine the world's original people he raised two young children in isolation in order to see which language they would first use. A herdsman cared for them, feeding the children on goats' milk. After two years the children came up with the word 'bekos', the Phrygian word for bread, thus establishing for the king that Phrygian was humankind's oldest language (Hdt. 2. 2). This trial by Psammetichus is the most famous and influential linguistic experiment of antiquity, perhaps the most famous linguistic experiment of all, for Herodotus' story has had a long and varied *nachleben* over the centuries.¹

We do not know what facts, if any, lie behind this tale of the Egyptian's experiment. It does not really matter, for our purposes, if the trial or its results are genuine. What is important is *Herodotus'*

¹ In his magisterial survey of views on the origin and diffusion of language in a variety of cultures and ages, Borst (1957–63) includes numerous descriptions of the reactions by different thinkers to Psammetichus' experiment. The references found in Borst 1963, iv, 1942 n. 191 (Ursprachen-Experimente an Kleinkindern) and those listed in his index under 'Psammetich I' present a good sample of the citation of Psammetichus' experiment by thinkers in the ancient world, Middle Ages, Renaissance, Enlightenment, and later.

acceptance of the test as real: he describes the experiment as an actual, scientific trial which took place and he seems to find the result credible. As a supposedly true account, the various elements of the story—the king's means of experimentation, his assumptions, and reasoning—are meant to make sense to Herodotus' Greek readers. And not only to Greek readers: for many centuries, from the ancient world onwards, various thinkers did take Psammetichus' trial to be a real experiment. Viewed in this light, Herodotus' tale is a useful source for Greek—and others'—ideas on the beginnings of language.

If we follow, then, in the footsteps of Rousseau, setting the facts aside, and taking Psammetichus' experiment on its own terms, as a real trial, we can learn a great deal about approaches to the beginnings of speech.² Hindsight shows that Psammetichus' experiment contains the seeds or bare bones of many of the hypotheses relating to the origin of language which will engage much later thinkers. Indeed, the king's experiment was used by a whole series of scholars over many centuries to answer or elucidate a range of questions related to the origin and acquisition of language. Different approaches to the trial have produced, time and again, fresh angles and outlooks. Variations on Psammetichus' test were actually performed by several monarchs and the trial also served—and still serves—as the basis for a whole procession of thought experiments. In this fashion, Psammetichus' children have produced a great many descendants.

The solution proposed by Psammetichus to the question of the world's first language would not satisfy anyone today, but his interest in the earliest form of speech is certainly valid. We must not forget that we are no more capable of identifying humankind's first tongue than the king was. It is true that Psammetichus was interested in determining which of the world's *existing* languages could be considered the oldest, and he clearly did not allow for the possibility that the very first language no longer existed or had been radically transformed over the course of time. Modern researchers who are interested in establishing the earliest form of speech hardly expect that this will be a contemporary language. Yet these

² See Schreyer 1984 for an illuminating discussion of the rationale behind 18-cent. 'conjectural' or 'philosophical' (i.e. fictional) histories, such as Rousseau's *Discourse*, which describe the origin of mankind and of language. The phrase 'theoretical or conjectural history' was, in fact, first used in relation to an essay by Adam Smith on the origin of language; see Bryce 1983, introd. 24 and see below, Sect. 3.

researchers would not reject every facet of Psammetichus' experiment and they share at least some of the king's notions about language and its beginnings. It is quite illuminating to compare the Egyptian's approach with modern methods and hypotheses. In the following pages, then, I shall be moving back and forth from several perspectives—in particular those of ancient Greeks, Enlightenment thinkers, and modern researchers—in an attempt to appreciate the rich legacy of Psammetichus' experiment. I shall often approach the experiment as if it were an authentic trial with real results in order to tease out all the implications of the tale.

Herodotus' Account

Let us begin with a closer look at Herodotus' account of the experiment, before turning to later reactions, analyses, and variations. Herodotus' text (2. 2) reads as follows.

Οἱ δὲ Αἰγύπτιοι, πρὶν μὲν ἢ Ψαμμήτιχον σφέων βασιλεῦσαι, ἐνόμιζον ἐκείνους πρῶτους γενέσθαι πάντων ἀνθρώπων. Ἐπειδὴ δὲ Ψαμμήτιχος βασιλεύσας ἠθέλησε εἰδέναι οἵτινες γενοῖατο πρῶτοι, ἀπὸ τούτου νομίζουσι Φρύγας προτέρους γενέσθαι ἐκείνων, τῶν δὲ ἄλλων ἐκείνους. Ψαμμήτιχος δὲ ὡς οὐκ εἶδυτο πυνθανόμενος πόρον οὐδὲνα τοῦτο ἀνευρεῖν οἱ γενοῖατο πρῶτοι ἀνθρώπων, ἐπιτεχνάται τοιοῦδε. Παιδιά δύο νεογνά ἀνθρώπων τῶν ἐπιτυχόντων ἀνδοὶ ποιμένι τρέφειν ἐς τὰ ποιμνία τροφήν τενα τοιήδε, ἐντειλόμενος μηδὲνα ἀντίον αὐτῶν μηδεμίαν φωνὴν ἰέναι, ἐν στέγῃ δὲ ἐρήμῃ ἐπ' ἐκείνων κείσθαι αὐτὰ καὶ τὴν ὥρην ἐπαγινέειν σφι αἰγας, πλήσαντα δὲ τοῦ γάλακτος τὰλλα διαπρήσσεσθαι. Ταῦτα δὲ ἐποίησε καὶ ἐνετέλλετο [δὲ] Ψαμμήτιχος θέλων ἀκοῦσαι τῶν παιδίων, ἀπαλλαχθέντων τῶν ἀσχημῶν κνυζημάτων, ἥτινα φωνὴν ῥήξουσι πρῶτην. Τὰ περ αὖν καὶ ἐγένετο. Ὡς γὰρ διέτρεχεν χρόνος ἐγεγόνεε ταῦτα τῷ ποιμένι πρήσσοντι, ἀνοίγοντι τὴν θύρην καὶ εἰσόντι τὰ παιδιά ἀμφοτέρω προσπίπτοντα "βεκός" ἐφώνεον ὀρέγοντα τὰς χεῖρας. Τὰ μὲν δὴ πρῶτα ἀκούσας ἡσυχος ἦν ὁ ποιμὴν ὡς δὲ πολλάκις φοιτῶντι καὶ ἐπιμελούμεν πολλὸν ἦν τοῦτο τὸ ἔπος, οὕτω δὲ σημήνας τῷ δεσπότη ἡγάγε ταῦτα παιδιά κλειόμενος ἐς οἶκον τὴν ἐκείνου. Ἀκούσας δὲ καὶ αὐτὸς ὁ Ψαμμήτιχος ἐπυνθάνετο οἵτινες ἀνθρώπων "βεκός" τι καλέουσι, πυνθανόμενος δὲ εὗρισκε Φρύγας καλέοντας τὸν ἄρτον. Οὕτω συνεχώρηναι Αἰγύπτιοι καὶ τοιοῦτω σταθμωόμενοι πρήγματι τοὺς Φρύγας πρεσβυτέρους εἶναι ἐκείνων. Ὡς δὲ μὲν γενέσθαι τῶν ἱέρων τοῦ Ἡφαίστου [τοῦ] ἐν Μέρφῃ ἤκουον Ἕλληνες δὲ λέγουσι ἄλλα τε μάταια πολλὰ καὶ ὡς γυναικῶν τὰς γλώσσας ὁ Ψαμμήτιχος ἐκταμὼν τὴν δαίταν οὕτως ἐποίησας τῶν παιδίων παρὰ ταύτησι τῇσι γυναιξί. Κατὰ μὲν δὴ τὴν τροφήν τῶν παιδίων τοσαῦτα ἐλεγον.

The Egyptians, before Psammetichus became their king, thought that they were the oldest of mankind. But Psammetichus when he became king, wanted to know which were the oldest, and from that time the Egyptians consider that the Phrygians are older than themselves, but that they, the Egyptians are older than anyone else. For Psammetichus, when he could not in any way discover by inquiry which were the first people, devised the

following plan. He took two newborn children of just ordinary people and gave them to a shepherd to bring up among his flocks. The manner of their upbringing was to be this: the king charged that no one of those who came face to face with the children should utter a word and that the children should be kept in a lonely dwelling by themselves. At a suitable time the shepherd was to bring the goats to them, give them their fill of milk, and take care of any other matters. Psammetichus did this and gave these orders because he wished to hear from those children, as soon as they were done with meaningless noises, which language they would speak first. This, indeed was what happened. For when two years had gone by, as the shepherd was performing his tasks, he opened the door and went in and the children fell before him and reached out their hands, calling out 'bekos'. At first, when the shepherd heard this, he remained silent about it. But as he came often and paid attention, this word was frequently spoken by them. So he signified this to his master and at his command brought the children to his presence. When Psammetichus himself had heard, he inquired which of mankind called something 'bekos'. On inquiry he found that the Phrygians called bread 'bekos'. So the Egyptians conceded and, making this their measure, judged that the Phrygians were older than themselves. I heard this story from the priests of Hephaestus in Memphis. The Greeks tell, among many other foolish stories, one to the effect that Psammetichus had the tongues of certain women cut out and made the children live with these women. This is what they said about the rearing of the children. (David Grene translation, slightly adapted.)

What is the provenance of this tale? Herodotus mentions priests in Memphis as his source for the trial and its surprising results, but it is unlikely that the story is Egyptian in origin. The greatest difficulty in assigning an Egyptian provenance is that *bekos* sounds too much like an Egyptian word. Psammetichus surely would have noticed this resemblance to Egyptian and used it to prove the primacy of his own language and people.³ Commentators also note that the tale includes many Greek—more specifically, Ionian—elements, most notably the scientific approach used to tackle the problem.⁴ Several scholars suggest that Herodotus' account was written in the wake of his predecessor Hecataeus, who perhaps presented the 'foolish', that is, tongueless women version of the trial. Herodotus' rejection of this alternate version seems intended to

³ Lloyd 1976, 10 (ad Hdt. 2. 2) refers to one of the Egyptian names for Egypt, *Bakt*, and the Egyptian word for bread, *pa-ako*; see too How and Wells 1928, i. 156 (ad 2. 2. 5) and see Salmon 1956, 323. *Bekos* is in fact the Phrygian word for bread—see Hipponax fr. 125 West. Herodotus mentions an Egyptian word for bread, *kalēphos* (2. 77. 4).

⁴ For the Ionian elements see Lloyd 1976, 9–11 (ad Hdt. 2. 2) and the further references in Vannicelli 1997, 203–4 with nn. 7 and 12. Borst 1957, i. 39–40 argues for the Egyptian origins of the experiment.

make the herdsman version appear all the more credible: the experiment and its results are plausible.⁵

A whole series of assumptions underlie *Psammetichus'* experiment.⁶ The Egyptian king assumes that there was a nation which pre-dated others, a group of first people. These people spoke an original tongue, a first language which preceded others. This first language was unique, the sole original tongue. It has not changed over time and is still in use. The king does not conceive of an oldest people without any language nor does he expect that the two isolated children will remain without speech. *Psammetichus* believes that language is innate in humans.⁷ Perhaps language is innate because it is granted by the gods, but this is not expressly stated by Herodotus. When other influences are removed, this innate, possibly divinely given, original tongue is the 'default' language available to humans.⁸ Thus *Psammetichus* assumes that the two children, when left to their own devices, will acquire the language of the world's first people. While *Psammetichus* does not expect this first civilization to be primitive—for he thinks that this earliest society is his own Egyptian one—he nonetheless places the children in a situation similar to that of a rudimentary and undeveloped society, allotting them simple shelter, a plain diet, restricted society, and speechlessness. The king does not anticipate that the two infants will speak this first language from the moment of birth. He assumes that they will follow the usual development of language in babies: meaningless sounds, which are then followed by articulate speech, in this case, in the world's first language. Finally, *Psammetichus* supposes that the first language must be a verbal one, and the use of a single word of speech suffices to indicate the acquisition of this tongue.

⁵ See Lloyd 1976, 8–9 (ad Hdt. 2. 2) on Hecataeus; compare Müller 1997, 211–13. Salmon (1956) thinks that the story was invented by a Greek in order to mock *Psammetichus*. Even if this is true, Herodotus was duped by his source, for there is no indication that the historian finds *Psammetichus* ridiculous here. At the same time, elsewhere in the *History* Herodotus continues to refer to the Egyptians as the oldest people (e.g. 2. 15), while treating the Phrygians as younger (7. 73)—see Froidefond 1971, 141.

⁶ See the discussions in Borst 1957, i. 39–40; Benardete 1969, 32–5; Lloyd 1976, 5–6; Harrison 1998, text near nn. 131–4.

⁷ Robinson (1979, 217; ad *Dissoi Logoi* 6. 12) calls the experiment 'the clearest extant example of an "innateness" theory of this sort'.

⁸ While Benardete (1969, 34) has suggested that this original language was thought to be an Adamic one of divine, natural names for things, this is not immediately apparent from Herodotus' text. The phrase 'default setting' is that of Harrison 1998, text near nn. 132–3.

Psammetichus and Modern Linguists

Which of *Psammetichus'* ideas about language might a modern-day scholar share? Many modern thinkers would agree with the Egyptian king that there was one original language, a protolanguage, for it is often assumed that human speech evolved only once and was never reinvented.⁹ Nowadays, however, it is generally thought that the world's first language came out of Africa, not Phrygia.¹⁰ Present-day linguists share *Psammetichus'* desire to learn something about the original tongue of mankind, but often their approach to the question is to work backwards, reconstructing protolanguages on the basis of comparative historical material. (*Psammetichus* and the Greeks had no concept of genetically related languages and did not really recognize the different historical stages of a given language.)¹¹ Modern linguists attempt to reconstruct a super ancestor of languages, a language termed by scholars Nostratic, which unites several *phyla* or families of language families: Indo-European, Uralic, Dravidian, Afro-Asian, etc. Nostratic is based on a careful comparison across linguistic groups. Some researchers go even further back in time, and attempt to trace Proto-Nostratic, an ancestral protolanguage.¹² Both Ancient Egyptian and Phrygian, incidentally, belong to the Nostratic superphylum.¹³ Modern scholars, unlike *Psammetichus*, do not expect the world's first language to be one that is still spoken today, a language which will then point to the world's oldest people. At the same time, some modern researchers *do* attempt to study the links between early peoples and protolanguages. Scientists have constructed a genetic family tree of humankind, in which humans are grouped according to the similarity of their DNA. These groupings of humans based on genetic studies correspond fairly closely to the proposed groupings

⁹ See e.g. Burkert 1996, 18: 'Language is linked to an uninterrupted chain of historical tradition; it has never—in tens of thousands of years—been reinvented.' See too Danesi 1993, 20–1; Aitchison 1996, 169; Pinker 1994, 259 etc. There is also a whole series of polygenetic hypotheses—see Lyons 1988, 141–2; Aarsleff 1982, 186; Eco 1995, 114; Crystal 1997, 293.

¹⁰ See e.g. Leakey 1994, 86–90; Aitchison 1996, 55–63.

¹¹ See e.g. Harrison 1998, section 4 ('The imagined relationship between Greek and foreign languages').

¹² See Danesi 1993, 20–1; Aitchison 1996, 168–9; Pinker (1994, 251–9) notes that these hypothetical original languages are speculative and controversial.

¹³ Egyptian belongs to the Afro-Asian phylum (= Southern Nostratic) while Phrygian belongs to the Indo-European phylum (= Northern Nostratic).

of languages (and superlanguages) when arranged according to a family tree of reconstructed similarities: the branches of the hypothetical linguistic tree seem to match the major racial divisions of mankind. This is not to say of course that genes have any intrinsic connection with specific languages, or that a child's genes will determine the language she will speak. We shall see that this view was already elegantly refuted in classical Greece. The correspondence between the genetic tree and the language tree simply points to the fact that 'when people migrate, they take both their genes and their language with them'. This modern matching of genetic stocks with linguistic families is controversial and far from certain.¹⁴

Psammetichus has no doubt that the children in his experiment will speak a language: he sees language, a specific language, as innate in human beings. While no modern scholar would accept the idea of a *particular* language being present in human beings from the outset, most would grant that some sort of readiness for language is innate in humans. The existence of a language gene or language instinct is a highly moot issue nowadays. Some researchers argue for an innate human language organ enabling the acquisition of language, while others contend that children are able to acquire language as quickly as they do because a universal grammar, rules which underlie all the (syntactical) instances of specific human languages, is part of the 'hardware' of the human brain. Other thinkers stress the part played by individual intellectual achievement, a method of trial and error, in acquiring language. In short, there is today a wide spectrum of views on the innateness of language, ranging, on the one hand, from speech being almost entirely the product of culture to the opposite view, that language is almost entirely a biological capacity. Most modern-day researchers would grant at least some weight to the biological view.¹⁵

¹⁴ The quotation is from Altmann 1997, 228. See Cavalli-Sforza 2000, esp. ch. 5; compare Pinker 1994, 258; Aitchison 1996, 169.

¹⁵ Pinker (1994) is perhaps the strongest advocate of a language instinct; Chomsky (e.g. 1968) argues for a universal grammar; Sampson 1997 is a vociferous opponent of their views. For the middle ground, see e.g. Aitchison 1996, 37: human language is an example 'of innately guided behaviour, in which the outline framework and learning mechanisms are provided by nature, and the details filled in by experience'. She continues (46): 'language can be separated from general intelligence ... language has its own specialized circuit within the mind/brain'.

Ontogeny and Phylogeny

A further assumption held by Psammetichus is that the development of language in isolated children is analogous to its original development in humankind. The king expects that the two children will retrace the path taken by people of old, speaking their language. The idea that childhood recaptures the childhood of man or in the notable phrase of Darwin's supporter, Haeckel, that 'ontogeny recapitulates phylogeny' is not one that modern investigators into the origin of language would reject out of hand.¹⁶ There is of course a difference between Psammetichus' approach and that of modern researchers. If the king expects the children simply to speak the first language of long ago, modern thinkers use children to learn the *stages* of earliest speech, the process by which language first emerged. Physically, the position of an infant's larynx is like that of chimpanzees and the larynx descends to its mature, lower location only after a child is several months old, reflecting the evolutionary transition. More interesting for our purposes is the fact that young children make sounds—to get attention, to request something, to describe a situation—before they actually understand the concept of assigning a name to an object. In parallel fashion, modern researchers argue, early man may have used a variety of sounds—lip-smacking, imitations of natural sounds, grunts while heaving an object—and formed several proto-words, without actually naming things. Once children appreciate the power of naming, this can lead to a great spurt of word acquisition, a desire to keep learning words and naming things. Similarly, perhaps, the understanding of the naming process by early humans and the development of a repertoire of different sounds was a further stage in their development, leading to actual, full-fledged language. Children *do* teach us something about the beginnings of language and we shall see that modern linguists find it tempting—and potentially illuminating—to use children to learn more about the origin of speech, just as Psammetichus does. They refrain from such 'impossible, unnatural and illegal' experiments,¹⁷ for ethical and, at times, practical

¹⁶ The following is based on Aitchison 1996, 93–104, who has a useful discussion of how the rule 'ontogeny recapitulates phylogeny' does—and does not—hold true in the acquisition of language. See too Bornstein 1996, esp. 152; Danesi 1993, 6 and 22; Stokoe and Marschark 1999, 169 (quoted below, n. 40).

¹⁷ Thus Max Müller (in Harris 1996, 9) describes Psammetichus' experiment and later re-enactments of the trial.

reasons, but not because Psammetichus' idea of using young children is senseless. Finally, Psammetichus' assumption that the first language used by humans would be one of words is not a hypothesis that all modern scholars would accept. We shall see that some thinkers today believe in a language of gestures as the first language, rather than a verbal tongue. In classical Greek, the very words used for language—terms such as *λόγος*, *φωνή*, or *γλῶσσα*—indicate that language is thought to be synonymous with speech.¹⁸

Psammetichus' Scientific Inclinations

Psammetichus' curiosity and scientific inclinations appear elsewhere in Herodotus' *History*, for we see him performing a second experiment. Psammetichus attempts to sound the depths of the springs of the Nile, using a rope thousands of fathoms long: once again he executes an open-ended trial whose outcome is not immediately apparent. The king's sounding line does not reach bottom, leading him to conclude that the springs are bottomless. Herodotus find the results of Psammetichus' second experiment unconvincing and he doubts that the trial actually took place (2. 28).¹⁹ (It is worth noting again that Herodotus expresses no such reservations about the linguistic experiment.) Later writers will embroider this picture of an experimenting king. Clearchus of Soli, a Peripatetic, amusingly combines elements of both of Psammetichus' experiments: the king, we are told feeds young children only fish from birth in order to discover the sources of the Nile. Other children are trained to go without drink in order to explore the sands of Libya. In this Peripatetic account, the Egyptian king is once again cruel and curious, depriving children of a normal upbringing in order to discover (geographical) facts.²⁰

Herodotus also provides us with further evidence for Psammetichus' interest in the language youngsters speak. The king, he recounts, dispatches Egyptian children to his Ionian and Carian mercenaries in order to have them learn Greek. These bilingual

¹⁸ Robinson 1955, 221–3 (=1969, 100–3) discusses the Greek words used for 'language'. See too below, Sect. 5.1.

¹⁹ Herodotus uses what seems to be a technical word for experiment, *διάπειρα* when describing both of Psammetichus' trials (2. 28. 4; 2. 15. 2); see Christ 1994, 174 and 182–3 with n. 40. Benardete 1969, 41, interprets both experiments as an attempt to go back to beginnings.

²⁰ Clearchus of Soli fr. 98 Wehrli = Athen. 8. 345e. It seems clear that the *παῖδες* of his text should be taken as children, not slaves.

children are the origin of the Egyptian class of translators (2. 154. 2; see 2. 164). Here too the king elects to send young children away from home for linguistic purposes—in this case, perhaps, because he realizes that children are better at learning second languages than adults. These children-turned-interpreters are lucky to survive the results of their tutelage so well, for Herodotus brings three other instances of children learning a second language and in all three cases the children pay dearly for their knowledge of another culture.²¹ Here, as in our experiment, Psammetichus' cavalier treatment of children does not seem to harm them. The king's desire to have Egyptian youngsters learn Greek is surprising for the Egyptians, Herodotus tells us, were unwilling to adopt foreign customs, Greek or otherwise (2. 91. 1). They also took great pride in their language. Just as the Greeks look down on those who speak a foreign tongue, terming the speakers of an incomprehensible language *barbaroi*, the Egyptians call all those who do not speak *their* language *barbaroi* (*βαρβάρους δὲ πάντας οἱ Αἰγύπτιοι καλέουσι τοὺς μὴ σφίσι ὁμιλωσσοὺς* 2. 158. 5). In the Egyptian scheme of things, the Greeks, then, are *barbaroi* (that is, speakers of an unknown language) and—in consequence—are thought to be less civilized. The Greek mercenaries from Ionia who will teach the Egyptian children Greek, said to be the very first foreigners who settled in Egypt, are described by Herodotus from this Egyptian perspective and called *ἀλλόγλωσσοι*, speakers of another (i.e. non-Egyptian) language (2. 154. 4).²² When Psammetichus sends children to learn from the *alloglossoi* it may be in the wake of the chastening results of his experiment: perhaps he can no longer believe in the superiority of the Egyptian language.

Scientific Controls and Isolation

Let us return to Psammetichus' linguistic trial. Given the king's background assumptions, the experiment is carefully planned and executed. He even uses several controls. Psammetichus takes newly

²¹ The Scythian king Scyles who is taught Greek language and letters by his mother (4. 78) is put to death because of his attachment to Greek ways; the half-Pelagian children taught the Attic tongue and Athenian ways by their captive Athenian mothers (6. 138) are executed for thinking themselves superior; and a Mede youngster tutored in archery and the Scythian language by Scythian hunters is served up as a dish to the Mede king Cyaxares (1. 73). See too Harrison 1998, text near n. 22, who notes that the adult Amazons described by Herodotus find it difficult to learn Scythian (Hdt. 4. 117); see below, Sect. 5.3.

²² The word *ἀλλόγλωσος* is found in an early 6th-cent. inscription dedicated by

born children, presumably in order to ensure that they will still be without speech of any kind. We don't know their sex—later versions often ensure that there will be a boy and a girl²³—and they seem to have been chosen at random, from families who are not distinguished in any particular way (*ἀνθρώπων τῶν ἐπιτυχόντων*). Perhaps only ordinary people could be compelled by the king to hand over their children for experimental purposes, but the infants' very ordinariness and randomness make for a more objective result. The children have no particular characteristics—genetic or otherwise—which would affect the outcome of the experiment, their acquisition of a language. Another necessary and obvious precaution is that no one is to utter anything in the children's presence. Here the meaning of the term *φωνή* in Herodotus' description of Psammetichus' command *ἐντεταμένος μηδὲν ἄντιον αὐτῶν μηδεμίαν φωνὴν ἔναι* is crucial: did Psammetichus order the shepherd to prevent the making of any *sound* in the presence of the children or did he forbid the speaking of *words*? Does *φωνή* indicate articulate language or sound? Elsewhere in the *History*, Herodotus uses the word *φωνή* to refer to articulate speech, a cry or voice, language, and the cry of animals.²⁴ Further along in our passage *φωνή* clearly means language, for we are told that the king wishes to know which language the children will first speak *ἥντινα φωνὴν ῥήξουσι πρώτην* (2. 2. 3) and this is glossed several chapters later as *τίνα γλῶσσαν πρώτην ἀπήσουσι* (2. 15. 2). It seems that in the king's directive *φωνή* means articulate language rather than sound: we can assume that the herdsman himself was silent in the presence of these children, but the goats were not. If the children did hear the goats, then it is likely that it is the animals' bleating which inspired the children's 'word' *bekos*, not their acquaintance with the Phrygian word for 'bread'. Ancient commentators already voiced this suspicion, which frequently arises in discussions of the experiment.²⁵ Indeed, in classical Greek sources, the

Greek settlers in Egypt—see Meiggs and Lewis 1969, 12–13 (no. 7(a), line 4), and Lévy 1992, 201 n. 35.

²³ See Salmon 1956, 321–2 n. 3, who points out that the neuter form *τὰ παῖδια* is used consistently to describe the children.

²⁴ See Powell 1966, 377 s.v. *φωνή*. Translators often translate *φωνή* here as 'word', i.e. no one is to utter a *word* in front of the children. Compare Herodotus' use of *τοῦτο τὸ ἦθος* in our passage, when referring to *bekos* as an actual word.

²⁵ For ancient comments see *Suda* β 229 s.v. *βεκεόληνη*; Σ Tzetz. Ar. Nub. 398a and E ad Apoll. Rhod. 4. 257–262c. Fehling (1989, 141) suggests that Hdt. himself expects his readers to draw this conclusion. A wide range of later thinkers also claim that the goats' bleating lies behind the children's speech—see Launay 1980, esp. 405

sounds made by young children are sometimes compared to the bleating of sheep or goats.²⁶

Isolation from Society

The children are to be raised in a solitary hut by themselves (*ἐν στέγῃ δὲ ἑρήμῃ ἐπ' ἑωυτῶν κείσθαι αὐτά*). The hut is at least minimally sophisticated, a structure constructed by men, for it has a door which the shepherd opens. In later variations on Psammetichus' experiment—real and imaginary—the children will live on a desert island, in a forest, etc., often without any real shelter. Psammetichus isolates the two infants in this hut and such isolation prevents them, of course, from learning the local language from their surroundings. But the isolation is not just a separation from local sounds; it is a psychological and social isolation as well. We are told very little of how the goatherd took care of the children other than giving them milk. Did he bathe or clothe them, hug or play with them? Since the shepherd was instructed to raise the infants in a hut, but among his flocks (*τρέφειν ἐς τὰ ποίμνια*), we should probably understand that he treated them much as he treated his sheep. In a similar, much later trial conducted by Frederick II of Hohenstaufen (1194–1250), aimed at discovering which language isolated children would speak, foster mothers and nurses fed and bathed several peasant infants without speaking to them. The youngsters die, in the words of a contemporary chronicle, because 'the children could not live without clappings of the hands and gestures and gladness of countenance and blandishments'.²⁷ While attested cases of feral children demonstrate that youngsters can survive without love or language, this account of Frederick's experiment is a particularly vivid reminder of the social and emotional factors which are a part of the learning of language.²⁸

and 412; Katz 1981, 134–5; Genette 1995, 123 and 367 n. 30. While it is clear how the animals' bleating could give rise to the first syllable 'be' of *bekos*—the second, 'kos', is less easily explained—see e.g. Launay 1980, 405. In some ancient accounts (e.g. Σ Tzetz. Ar. Nub. 398a) the children are said to produce the 'word' *βέκ* in the wake of the goats—*βέκ γάρ φασι καὶ τὰ πρόβατα*.

²⁶ See Ar. *Wasps* 569–72; Aes. *Sept.* 348 (with Σ); Eupolis fr. 112 K.–A., where the words for animal bleating—*βληχάουμαι* and *βληχῆ*—are used of young children; see Pollux 5. 88. See further Golden 1994, esp. 377–83, who collects characterizations of infants' and children's speech in Greek sources.

²⁷ The contemporary source on Frederick is the chronicle of a Franciscan friar, Brother Salimbene (1221–87)—see Holder-Egger (1905–13), 350 *non enim videtur posset sine applausu et gestu et letitia facies et blanditiis vasularum et masticum suorum*.

²⁸ For children of the wild see below, Sect. 3.

Modern scholars stress that emotional relationships are a significant factor in a child's acquisition of language. Human speech has been described as 'vocal grooming', a replacement for the social interaction in which animals engage when they groom one another. The attachment between parents and their children and the communication between them are closely related: each encourages and feeds upon the other. Many—but certainly not all—adults use a special form of language, termed 'motherese' to communicate with their young. Linguists note that 'motherese' has specific qualities which facilitate the learning of speech. These qualities include varied and exaggerated intonations, simple and slow utterances, and special expressive sounds. For a child raised in a loving family 'the word simultaneously emerges as the basis of the child's communication, the material of her social life and the organising principle of her thinking'.²⁹ The shepherd who cares for the children in *Psammetichus'* experiment is silent and presumably unaffectionate so that the youngsters are deprived of a great deal more than the sound of speech. Variant versions of the experiment where tongueless or silent mothers are said to care for their children provide a better means of encouraging the children to learn to speak.³⁰ Such mothers, we may imagine, would live with their children rather than appearing several times a day just to feed them as the shepherd does, and they surely would find some silent means to express their affection for their young.

Silence is a more crucial factor in *Psammetichus'* experiment than solitude, for the shepherd who cares for the children is a regular visitor. He functions as a third party, a representative of the outside world.³¹ The shepherd's presence is critical in guaranteeing that the infants stay alive: we shall see that later thinkers will be criticized for not making provisions for the survival of the children whom they isolate in thought. A male herdsman—unlike the

²⁹ Beaken 1996, 19; see too Aitchison 1996, 66–7; Crystal 1997, 237, 241; Sampson 1997, 88–9; Bornstein 1996, 159–61. Compare also Malson 1972, 51 and 56–7.

³⁰ 'Tongueless mothers: *Σ* vet. Ar. *Nub.* 398d. Silent mother(s): *Σ* rec. Ar. *Nub.* 398e; *Σ* Tzet. Ar. *Nub.* 398a; *Σ* Thomas-Triclinius Ar. *Nub.* 398b. Compare too the 'foolish' Greek account of tongueless women mentioned by Hdt. Golden 1995 is a study of instances of ancient Greek 'motherese' and baby talk.

³¹ See Launay (1980, 404), who sees the shepherd as a kind of royal delegate. In the variant ancient versions of the experiment where wet-nurses or mothers care for the children the king sends a special emissary to pay a visit and silently check whether the children have learned to speak. See *Suda* β 229 s.v. *βεκεσλήνη* (and *Σ* vet. Ar. *Nub.* 398b)—note *σιωπή παρέλθειν*; see too *Σ* vet. Ar. *Nub.* 398d.

tongueless women, presumably wet-nurses, whom Herodotus mentions in the alternate version at the end of our passage—cannot of course feed the children by himself and this explains the presence of the goats. We are specifically told that the goats are brought into the children's hut (*ἐπαγινέειν σφί αἰγας*), rather than, for example, the shepherd milking them outside and bringing in the drink.³² In several later ancient versions of the trial the goats are said to have actually suckled the children, strengthening the suspicion that the bleating of goats is the source of 'bekos'. The combination of isolated children, herdsman, and nurturing goats reminds us of various ancient tales of foundlings, most notably Herodotus' own story of Cyrus the Great. Cyrus, Herodotus tells us, was taken from his parents, removed to the wilderness, and brought up by the shepherd Mithradates and his wife Kuno. Later it was said that he was raised by a bitch (Hdt. 1. 122). In effect, *Psammetichus* is deliberately creating two children of the wild by means of his experiment; we shall return to such feral children below.

Interestingly, we do not find the two children in Herodotus' tale speaking to one another: both use their first word to address the herdsman. The shepherd does not eavesdrop on an exchange between the two, but is approached by the two children, gesturing and uttering the word *bekos*.³³ In much later thought experiments influenced by *Psammetichus'* trial the two solitary children will stir one another to speech and develop a language together. Here, having been granted, it seems, a word of language, they turn outwards. If, as *Psammetichus* seems to think, language is truly innate and not dependent on external stimulation, even one child would have sufficed to produce a first word for communicating with the shepherd. Indeed in ancient variant accounts of our experiment the king is said to have isolated a single infant, who then addresses the king's representative with the word *bekos* on his own.³⁴ If a single child is sufficient to establish the world's first language and people, we can

³² See Lloyd 1976, 7 on cow horns which may have been used as milk bottles in Egypt.

³³ This also happens in other ancient versions where the king sends an emissary to observe the children silently (above, n. 31): there too the children immediately address him, rather than one another.

³⁴ Single child: Claudian, *In Eutropium* 2. 251–4; *Σ* Thomas-Triclinius, Ar. *Nub.* 398b; *Σ* rec. Ar. *Nub.* 398f; *Σ* vet. Ar. *Nub.* 398c. Here we can compare another very gifted child of the wild, Tarzan, who teaches himself not to speak but to read. Lord Greytroke's son single-handedly manages to decipher the 'strange little bugs' of an illustrated alphabetic primer.

perhaps see *Psammetichus'* two infants as a double confirmation, with his experiment producing the same result twice over—both the children, taken together and separately, arrive at the same first language.

Here it is worth comparing an intriguing thought experiment found in an anonymous sophistic tract generally dated to the beginning of the fourth century BCE, the *Dissoi Logoi* (6. 12). The author argues against the idea that language is innate—*Psammetichus'* view—and suggests a trial in thought to prove his claim that speech is acquired from one's surroundings. If one were to send a newborn Greek baby to be raised in Persia and isolate him from the sounds of his native language, he will speak Persian, the anonymous author claims, while a Persian baby removed to Greece will learn to speak Greek. This thought experiment is an elegant armchair refutation of *Psammetichus'* actual trial. Simple reflection suffices to demonstrate that children acquire language from those around them, and there is no need to tear young children away from their families and experiment with them for over two years. The author of the *Dissoi Logoi* could have proved his point by dispatching (in thought) only one child to a faraway place: the use of two hypothetical children in reversed situations serves as a double confirmation of his thesis.³⁵

Psammetichus may have used two infants in order to establish the results of his experiment twice over, but it is likely that the children are somehow meant to stimulate one another to speech and communicate with one another, even if we only see them addressing the shepherd. Speech is a social act and *Psammetichus* probably used two children in order to create the barest minimum of a society. Two later actual experiments where children are isolated in order to investigate which language they will first speak involve an even larger number of children. Frederick II is said to have isolated several children, while Akbar the Great of India (1542–1605) reportedly used some twenty infants in his test.³⁶ We find larger numbers of children in linguistic thought experiments as well (below, Sect. 3). These bigger groups of children are used—in thought experiments and actual trials—to create a virtual civilization or society of

³⁵ See further Gera 2000, 22–30; Müller 1997, 210.

³⁶ See Sulek 1989, 647–8; Crystal 1997, 230 quotes a different account of the experiment. James IV of Scotland (1473–1513), the third royal imitator of *Psammetichus*, is said to have used only two children in his experiment—see Crystal 1997, 290.

children. At the same time, the greater number of subjects undergoing these trials serve to reinforce the experimenters' final results.

While *Psammetichus* thinks that language is innate, he does not, as we have seen, expect the isolated children to produce words at once, as newborns. The king anticipates that the children will first make incoherent sounds before voicing articulate words, and this, we are told, is exactly what happens. Meaningless babblings followed by recognizable single word utterances is, of course, the normal sequence of events when a young child learns to speak and *Psammetichus* is acquainted with these standard stages of language acquisition. Aristotle (*Hist. An.* 4. 536^b5–8) also notes that when young children find their voices, they cannot articulate clearly, but mumble and lisp. In the *Laws* (791e–792a) Plato's Athenian stranger states that a child makes a great deal of noise until the age of 3 for he can communicate only by cries and wails.³⁷ The Egyptian king expects even isolated children to follow these stages: this innate language is produced in the same way as any other tongue.

2. FIRST WORDS AND FIRST GESTURES

The Word Bekos

The children's first word, *bekos*, is in a language unknown to the shepherd. It seems that he is able to distinguish this unfamiliar first word as a *word*—rather than just one more bit of babbling by the youngsters—because it is accompanied by significant gestures. The children do not simply make the sound *bekos* one day; they fall upon the shepherd when he opens the door and utter the word while stretching out their hands. These movements underline the fact that they are trying to communicate something by means of the sound they voice. The shepherd will subsequently ensure that *bekos* is in fact a genuine word, a deliberate pronouncement, by waiting for the children to repeat the word, and they do, in fact, use the word again and again.

While gestures and word are intertwined in our account, it is useful to look at the two separately for a moment, beginning with the youngsters' word, *bekos*. If we continue to assume that the king's trial actually took place, it is not impossible that the two children

³⁷ See too Arist. *Aud.* 801^b5 and the further references cited by Golden 1994, 377, nn. 25–6.

came up with the sound *bekos* at some stage, repeating a familiar baa-ing sound.³⁸ The sound *bekos* in and of itself is not an inconceivable result; it is the king's interpretation of *bekos* as a meaningful word which is the most incredible part of his experiment. Psammetichus understands that the children are using the Phrygian word for bread and all three elements of his interpretation—the children's knowledge of Phrygian, their mention of bread, and their use of a sound as a specific word or name—raise insurmountable difficulties. It is inconceivable that children raised in solitude would articulate a recognizable, known word in Phrygian or any other existing language. Where would the knowledge of an actual, specific tongue come from? Their acquaintance with the concept of bread is no less problematic. These isolated milk-fed children should not know what bread is, unless we imagine that the shepherd munched on a loaf of bread while attending to them. What does 'bread' mean to a child who—according to the conditions of the experiment—has never seen or eaten a loaf? Renaissance writers commenting on Herodotus' tale will already wonder whether it is possible to use a word with no knowledge of the corresponding concept underlying it.³⁹ More generally, these isolated children should be incapable of using words, for they do not have the primitive concepts, the bare cognitive tools needed in order to assign words to objects. We cannot grant them any meaningful words, in the sense of a name for an object, even in a hypothetical language of their own joint invention.⁴⁰ Nor can we allow that they take the further step of agreeing upon the representation of a concept by an arbitrary sound.

Nonetheless, there may be another way to interpret the result of the experiment, the word *bekos*: we can accept the outcome of the trial even if we reject Psammetichus' interpretation of the word. The two children produce their word *bekos* together and the communication between them may have been something like the

³⁸ See above, n. 25, on the more problematic second element of *bekos*, 'kos'.

³⁹ See Launay 1980, 406, who refers to Guillaume Postel and Simon Goulard. For a modern scholar see e.g. Salmon 1956, 325.

⁴⁰ See Stokoe and Marschark 1999, 169: 'One of the spoils of the cognitive revolution has been general acceptance of the assumption that language development ontologically ... is facilitated by the availability of a primitive conceptual system in which concepts and linguistic units are in roughly a one-to-one correspondence. In the case of children acquiring their first language, the situation results from the fact that the language used by adults in the environment is already keyed to dividing up the world in ways that make cognitive and culturally/environmentally relevant sense.' No adult has divided up the world inhabited by Psammetichus' children.

exchanges between twins.⁴¹ Twins, particularly those aged around 2—the age at which Psammetichus' children are said to have uttered their first word⁴²—often indulge in phonetic play and speak to one another in a private language that is unintelligible to others. Psammetichus' children, like twins, are at the same linguistic level and spend even more time together than do many sets of twins. The private languages of twins with their idiosyncratic sounds, grammar, and vocabulary may be difficult to decipher, but nonetheless can generally be explained in relation to the forms of speech used around the pair.⁴³ Perhaps Psammetichus' children, who were not exposed to any forms of speech or sounds other than the bleating of goats, produce the word *bekos* to refer to the most important event in their daily lives, the arrival of their caretaker with their food. Ancient scholiasts—and later thinkers who followed in their wake—took *bekos* to be an imitation of the goats' noise, but seemed to think that this utterance was simply a meaningless sound, with the children speaking 'goatese'. Perhaps the children were doing more than imitating a sound: their word *bekos* could have been an onomatopoeic means of referring to something associated with the goats, such as their milk or perhaps the goats' keeper, the herdsman.

We have already noted that for children raised in normal circumstances, words are not the first stage of language development. Babies first babble nonsensical sounds and then produce meaningful utterances, single words, which very often do not function as names, but are holophrases or one-word sentences. These early utterances by children are used in a variety of ways—as questions, statements, and commands—and both gesture and intonation help convey and distinguish the different meanings of such single words. It is only later that single words voiced by young children are used as actual words and serve as nouns, verbs, etc.⁴⁴ *Bekos* could be such

⁴¹ See Crystal 1997, 290 and 249 for this suggestion of twin-like linguistic play by Psammetichus' children. The suggestion that *bekos* stems from the two children's babble was made already by Guillaume Postel in 1538—see Launay 1980, 408.

⁴² In some ancient accounts of the experiment the two children are older and first pronounce the word *bekos* at the age of 3 or even 4: *ΣΤΡΕΤΖ*. *Ar. Nub.* 398a; *Suda* β 229 s.v. *Βεκοέλης* (and *ΣΤΡΕΤΖ*. *Ar. Nub.* 398b); *ΣΤΡΕΤΖ*. *Ar. Nub.* 398c.

⁴³ Crystal 1997, 249; see too Bickerton 1990, 191, who argues that languages used by twins exhibit the features he assigns to protolanguages (see above, Sect. 2.2). See e.g. Jespersen 1922, 185–7 for an instance of Danish twins who spoke a language created by themselves in isolation, an idiolect, which bore a clear relation to Danish.

⁴⁴ See Aitchison 1906, 93–104; Crystal 1997, 238–47; Altmann 1997, chs. 2–4.

a holophrase, a word which is related in meaning as well as sound to the bleating of goats. The children could use such a 'word' without having to make use of sophisticated concepts to map out and divide up the world around them.⁴⁵ Moving beyond that one word and developing their own idiolect *ab ovo* would be an infinitely more difficult cognitive task for the experimental children, and indeed we hear in Herodotus only of a single word uttered by the two. But—again accepting for the moment the truth of *Psammetichus'* results—the two young children may have come up with one holophrase referring to the arrival of their food. When the pair rushed to the herdsman uttering *bekos*, they were signalling, perhaps, their recognition that food was on the way and demonstrating just how eager they were to receive their milk. Or they could have been expressing their delight at the arrival of their caretaker. *Bekos* would then mean something like the request 'milk, now!' or perhaps an acknowledgement or recognition of sorts, 'wonderful, milk is on the way' or 'here comes the man with the goats'.⁴⁶

We can in fact assign a variety of different meanings to the children's word in our attempt to interpret their alleged first pronouncement. We have already seen (above, Sect. 2.2) that in various theories on the origin of language, the postulated first word of the primeval language is a useful pointer indicating the most pressing concerns and orientations of the first speakers according to that theory. Here it is worth turning briefly to four famous glottogenetic theories of the eighteenth century—those of Vico, Condillac, Rousseau, and Herder—and the various first words suggested by these thinkers. Each one of these four modern theories is of some relevance to *Psammetichus'* trial. Or, to put it another way, we can interpret *bekos* in four different ways, applying each one of these theories in turn. Vico (1744) thinks that the first word of human

⁴⁵ Compare the 16th-cent. thinkers Postel and Du Bartas (Launay 1980, 407–8) who take *bekos* as an animal-like, passionate cry expressing hunger, rather than an articulated word.

⁴⁶ Compare Salmon 1956, 326–7, who suggests that the children are reacting with a Pavlovian response to the shepherd's arrival at a fixed time every day (καὶ τὴν ἄρην ἐπαύειν ἀπὸ αἰῶνος) with the goats. It is interesting to compare Jean Itard's report on the first word of the feral child under his care, Victor of Aveyron (see below, Sect. 3). Itard tried to teach Victor to use the word *lait* to express his desire for milk, but Victor would say *lait* only after he had received milk, as an expression of joy. Itard terms this use of language 'merely a vocal sign of the possession of a thing', and stresses that this is not a useful means of communication. See the translation of Itard's report (orig. pub. in 1801) in Malson 1972, 121–2.

beings was mimetic, an imitation of the frightening sound of thunder. In parallel fashion, *bekos* could mean that the children were imitating not a frightening sound, but the welcome noise of the goats, their source of sound and sustenance. Condillac (1746) imagines a pair of isolated children beginning to speak when one asks the other for help in reaching a desired object. Applying this to *Psammetichus'* trial we can imagine the two children turning as one with the request *bekos* to the shepherd, asking for their milk. Rousseau (1781) stresses the emotional impetus of speech and his imaginary first speakers are moved by feelings: one turns to the other with the request 'aimez-moi'.⁴⁷ According to this view the children, in unison, are greeting the *bekos* man, calling for some sign of affection from the shepherd. In the fourth theory, Herder's *Urmensch* (1772) is so stirred by the bleating and feel of a sheep that he is moved to name it. Here we can suppose that the pair of children are affected by the sight and sound of the goats, using the word *bekos* to express their recognition of the creatures. A plea (Condillac), an onomatopoeic word (Vico), the awareness of an animal's existence (Herder), or perhaps a call for affection (Rousseau): all could have a place in Herodotus' tale.⁴⁸

Let us examine the significance of first words according to *Psammetichus'* interpretation of *bekos*. As far as *Psammetichus* is concerned, the children's first word *bekos* is important because it discloses the world's first language, Phrygian. It is not the particular word voiced by the youngsters that is important, but the language to which that word belongs. We need not understand that *bekos* was the very first word of the Phrygian language, when the Phrygians were the world's first people and first speakers. Even if the 'original' Phrygian civilization included bread and all that it entails—sowing, reaping, winnowing, milling, and baking—it is difficult to conceive that bread would be the Phrygians' first word, that is, their greatest concern or chief preoccupation.⁴⁹ It is the children who fasten upon bread as their first word, and since they voice the word while falling upon (or before) the shepherd and

⁴⁷ We have seen that Rousseau discusses the origin of language in two separate works. This scenario is from the *Essay on the Origin of Languages* (ch. 10)—see above Sect. 2.2.

⁴⁸ See Trabant 1996 for an illuminating discussion of these four 18th-cent. theories on the origin of language and see above, Sect. 2.2.

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⁴⁹ See Salmon 1956, 325; Launay 1980, 407–8.

stretching out their hands, they seem to be importuning him.⁵⁰ The children are rather urgently requesting bread (whatever the difficulties in understanding how they have arrived at this concept). Apparently their simple, raw diet of goats' milk is not sufficient and the two-year-olds are asking to be fed as members of a cultured civilization with cooked food.⁵¹ One scholar sees the request for bread as concomitant with the use of language: the children are signalling that they are older and ready for the next stage of life, speech and solid food. They have acquired spoken language, leaving their indistinct animal-like murmurings (*κνυζήματα*) behind, and would like a civilized, human diet as well.⁵² In a much later execution of *Psammetichus'* experiment, performed by James IV of Scotland (1473–1513), a pair of infants are placed under the care of a mute woman, and provided with a great deal more than goats' milk. They were given, according to a later account, 'food, drink, fire and candle, clothes, with all other kinds of necessities which is required to man or woman'. It is not clear if all these accoutrements of civilization led to any acquisition of language by the children. Our source for James's trial states that while some people said that the children eventually spoke good Hebrew, he is not certain that this was so.⁵³

The word *bekos*, incidentally, left its mark on much later thinkers. The Flemish doctor Jan Van Gorp (Goropius Becanus) (1518–72), inspired by the tale of *Psammetichus*, gave himself the nickname Becanus from *bekos*. He believed that the world's first language was Flemish—the so-called Scythian hypothesis—and noted that the word *bekos* is close to the Flemish word for baker, 'becker'.⁵⁴

⁵⁰ The word *προσπίπτοντα* may mean either that the children fall upon the shepherd—in the *Svet. Ar. Nub.* 398d we find the paraphrase *προσεπλήθον*—or possibly that they fall before him in an attitude of supplication. Grene translates 'clasped his knees'; see too Salmon 1956, 327.

⁵¹ Lloyd 1976, 6–7 notes that goats' milk is more common with Greeks than Egyptians; the latter probably made the milk into cheese.

⁵² Thus Vannicelli 1997, 205–7. The word for the children's mutterings *κνυζήματα* (which is a *hapax* in Hdt.) is often used of animals, particularly dogs, as well as children. We have seen (above, Sect. 1.3) how the consumption of grain is an identifying characteristic of men in Homer, with humans termed *sitophagoi*.

⁵³ The source is Robert Lindsay of Piscottie, *The Historie and Chronicles of Scotland* (pub. orig. in 1576; edited in 1899 by J. G. Mackay). The experiment itself is dated over eighty years earlier, to 1493. Borst (1960, iii/1. 1010–11) finds this non-contemporary chronicle scarcely credible, while Hewes (1992, 6) sees the James IV experiment as the sole possible exception to the fact that no substantial contributions to the issue of language origin were made between 1000 and 1500 CE.

⁵⁴ In fact, *becker* is related to Greek *φάγω* or 'roast', while *bekos* is connected to the

Another play on the word is found in a laudatory poem introducing Cave Beck's scheme for a universal language to be written in characters and numbers, *The Universal Character* (1657). The writer of this prefatory poem notes that the word 'bekos' voiced by *Psammetichus'* children was prophetic, hinting at Beck's efforts to find a common speech.⁵⁵

There is one other instance of a speaker uttering his first words in Herodotus' *History* and these first words are of crucial importance. The Lydian king Croesus has a mute son who breaks into speech for the first time as a young man. He speaks in a critical, life-and-death situation, when a Persian soldier is about to kill his father. Croesus' son produces not a word but an entire sentence—Fellow, do not kill Croesus (*ὦνθρωπε μὴ κτεῖνε Κροῖσον*)—and thus saves his father's life. Once he has broken through the speech barrier, the young man continues talking to the end of his days (1. 85). There is something extraordinary about the speech wrenched out of Croesus' mute son—an oracle had forewarned Croesus that his son would first speak on an unhappy day⁵⁶—and we should not be surprised that his very first pronouncement is a complete sentence or that he speaks fluently thereafter. *Psammetichus'* children, who begin with one word, are considerably younger and their speech is expected to follow the normal pattern of language acquisition. Their vocabulary apparently remains at this one-word level for a considerable amount of time, for we are told that the shepherd will hear them repeat this single word, with no hint of further development. Croesus' son speaks out of fear of an impending evil, the death of his father, and it is the extreme situation which causes him to burst into speech.⁵⁷

Indo-European root which is reflected in Greek *πέσσω* or 'cook'. For Van Gorp, see Launay 1980, 408–9; Olender 1992, 2 and 146 n. 8; Hewes 1992, 6; Eco 1995, 96–7. Leibniz will coin the word 'goropiser' to describe the tracing of poor etymologies—see Eco 1995, 100–1.

⁵⁵ Katz 1981, 135.

⁵⁶ Hdt. 1. 85. 2; compare the earlier words of the Pythian oracle given to Croesus on comprehending the mute and hearing the voiceless *καὶ καρφὸς συνέμῃ καὶ οὐ φωνήεντος ἀκούω* (1. 47. 3). Golden 1995, 12 suggests that the story of Croesus' son should be read as a reversal: normally the day of a child's first word was a joyous one. Pease 1920 brings some ancient variations on the story of Croesus' son, including Pliny's statement that he first spoke at the age of six months (*NH* 11. 270), but Pliny may be referring to Croesus' other son, Atys.

⁵⁷ *ὅτι δέους τε καὶ κακοῦ ἐρρηξέ φωνῆν* Hdt. 1. 85. 4; compare *ἦντο φωνῆν ῥήματα* *πρώην* in our passage. The expression *ῥήματα φωνῆν* is used once more in Hdt. when a group of allies overcome their fears and speak up only after Sostrich of Corinth has spoken freely (*ἅπας τις αὐτῶν φωνῆν ῥήσας* 5. 93. 2). Here too there is a sense of an

Perhaps we should understand that *Psammetichus'* children produce their word under a similar compulsion or desperation. However we take the word '*bekos*', the most likely reason for the children breaking into speech is that they are attempting to communicate a hunger of sorts. The hunger could be for milk or bread, or it could be an emotional need, a desire for the human company of the shepherd.

First Gestures

The children's gestures of supplication or blandishment, which accompany their first word, also point to a strong emotion or need. They utter the word *bekos* while falling upon (or before) the shepherd and stretching out their hands (*ἀνοίγοντι τὴν θύρην καὶ εἰσὶν τὰ παῖδια ἀμφοτέρω προσπίπτοντα "βεκός" ἐφώνεον ὀρέγοντα τὰς χεῖρας*). These motions and gestures reinforce their one-word verbal message: the movements serve both as a kind of vocative, a way of greeting the shepherd, and a means of importuning him. When jointly pronouncing their first word, the youngsters deploy identical movements and gesticulations: gestures are no less common to the two than their speech. The children's 'language' of gestures seems to be richer than their verbal vocabulary. At the most elementary level, we see them using two motions—falling upon the shepherd and extending their hands—but only one word. Modern studies show that young children when still in their one-word stage of speech often use gestures along with the single words. At a certain point in the child's development, the gesture in such gesture-speech combinations conveys information which is different from that signified by the word.⁵⁸ We could apply this to *Psammetichus'* experiment and understand that the children use gestures to elaborate and underline their one word of speech.⁵⁹

obstacle overcome before they break into speech. When Hdt. refers once again briefly to our experiment he uses a different phrase: 2. 15. 2: οὐδέ εἰς σφῆας ἐς διάπειραν τῶν παιδίων ἵναί, τίνα γλῶσσαν πρώτην ἀπήσονται.

⁵⁸ See Goldin-Meadow 1999, esp. 118–20.

⁵⁹ Compare Mandeville's apt comment in *The Fable of the Bees* (Kaye 1924, ii. 290) [§343–4]: '... Signs confirm Words, as much as Words do Signs. . . . When an Infant, in broken imperfect Gibberish, calls for a Cake or a Play-thing and at the same time points at and reaches after it, this double Endeavour makes a stronger Impression upon us, than if the Child had . . . spoke its Wants in plain Words, without making any Signs This is precisely what occurs with *Psammetichus'* children.'

Where do these gestures come from? Were they independently invented by the children? A great deal of research has been done in recent years on gestures and sign languages. Studies show that deaf children living with a speaking non-signing family, that is to say deaf children living in a linguistically deprived environment without any language they can learn, develop signs of their own, known as home signs, in order to communicate with their surroundings. Such signs take on a form close to language with many home signers distinguishing, for example, between gestures used as nouns and gestures used as verbs. The gestures used by such deaf youngsters do not resemble gestures used by their parents and generally seem to be invented by the children themselves. 'Even the lack of a model does not prevent the human child from communicating with self and other'.⁶⁰

The deaf children investigated in these modern studies are normally single children who live in society, in their parents' home. Could *Psammetichus'* children, hearing children, who live in a linguistically deprived situation, have devised gestures to communicate with one another (and the shepherd)? The children's environment, as we have seen, is not just linguistically deprived, it is also physically and socially—and consequently cognitively—deprived.⁶¹ Their surroundings are wanting in every aspect, other than the bare physical necessities needed to keep them alive. The children's lack of cognitive tools and basic concepts should make it difficult for them to acquire any form of language, whether gestural or verbal. Yet it is worth noticing just how universal the gestures used by the children are: they fall upon the shepherd, possibly grasping his knees, and stretch out their hands. These are gestures of submission and supplication which are found in a wide range of cultures and even extend to the great apes of the animal kingdom.⁶²

Are the children using a gestural language? The argument that language originally began with gestures is an old one, but it continues to win the support of modern-day adherents. In a recent formulation of the theory it is suggested that gesture and meaningless

⁶⁰ [Continuation of quote] 'in the here-and-now and about the non-present, using the segmented and combinatorial representational format that is the hallmark of human language', Goldin-Meadow 1999, 126.

⁶¹ See Bornstein 1996 and see above, Sect. 1 and n. 40.

⁶² Burkert 1996, 85–8 with notes on 211–12; Beaken 1996, 51; see too Lomay 1980, 406 and compare e.g. H. 1. 500–2.

vocalizations were the origin of language.⁶³ At a later stage, the vocalizations used with gestures became differentiated, and sounds, arbitrary sounds, became symbols for meanings. With the advent of these spoken words, gestures became a supplement or elaboration of speech. The children in our tale could be at this pre-word stage, if we understand that they use significant gestures while making a meaningless sound, a sound influenced by the goats. From this perspective—that of the primacy of a language of gestures—Psammetichus' intention may have been realized: the gesturing, babbling children could be an instance of ontogenesis recapturing phylogenesis.

There are two children used in Psammetichus' experiment. What happens when two signing children get together? Present-day researchers have studied the results of encounters between deaf children equipped with their own individual home signs. When a community of such children was created virtually overnight in schools for the deaf in Nicaragua, the deaf children learned to communicate with each other using gestures, but such communication did not yet amount to an actual full-fledged language, only a pidgin. When younger children joined in and were exposed to this pidgin, they then turned it into a creole and a true sign language emerged. Researchers conclude: 'The Nicaraguan data indicate that the emergence of a true language is dependent upon a community of users and does not arise spontaneously in individuals.'⁶⁴ In sum, we can imagine that Psammetichus' community of two culturally impoverished children have developed, at the very most, a pidgin language of gestures.

3. LATER VARIATIONS ON PSAMMETICHUS' TRIAL

Re-creating the Experiment

Psammetichus' children were not the only youngsters to be raised in silence as part of an experiment. We have already encountered three further trials performed by three kings, Frederick II of Hohenstaufen (1194–1250), James IV of Scotland (1473–1513), and Aqbar

⁶³ See Stokoe and Marschark 1999. Corballis and Lea 1999 includes several articles which support the theory of an original language of gestures; see too Kendon 1991. Hewes (1976 and 1992) provides general surveys of the history of the gesture origin theory.

⁶⁴ Emmorey 1999, 139.

the Great of India (1542–1605).⁶⁵ It surely is not a coincidence that autocratic rulers are the ones to execute such heartless trials. These experimenters are not just philosophically minded, inquisitive individuals, but kings who can carry out their plans, harsh and cold-blooded though they may be. Perhaps only reigning, autocratic monarchs would dare to experiment this way with young children.⁶⁶ In all the various ancient versions of Psammetichus' experiment there is an element of cruelty: mothers forced to raise their children in silence, women who have their tongues cut out, children who have no human contact whatsoever, even a single child brought up in speechless solitude, without the solace of the company of another human being.⁶⁷ The later rulers, Frederick, James, and Aqbar, are similarly unfeeling in their pursuit of knowledge, but their questions, assumptions, and the conditions they provide for the children all differ.

Frederick believed that Hebrew was the world's original language—a popular hypothesis over many centuries.⁶⁸ Nonetheless he was interested in determining the first language of isolated children. He had silent foster-mothers nurse and bathe infants in order to see whether their first tongue would be Hebrew, Greek, Latin, Arabic, or perhaps the native language of their parents.⁶⁹ It is these children who are said to have died from a lack of tenderness. Frederick does not seem to expect that the children will speak the world's oldest language, but he shares Psammetichus' assumption that the children will come up with a known, recognizable tongue.

⁶⁵ See e.g. Crystal 1997, 230 and 290; Danesi 1993, 5–6; most detailed is Hewes 1992, 5–6 and Sulek 1989, 647–8.

⁶⁶ Even in the variant versions in the ancient scholia it is another Egyptian king who is said to have performed the experiment—i.e. *Σ*vet. Ar. *Nub.* 398c says that it was the Egyptian ruler Sesonchosis. Only in the Thomas-Triclinius scholia Ar. *Nub.* 398b do we find that an unnamed group of rivalrous Phrygians and Paphlagonians put one child to the test.

⁶⁷ Tongueless wet-nurses: Hdt. 2. 2. 5; *Suda* β 229 s.v. *βεκεσθαι*; *Σ*vet. Ar. *Nub.* 398b, 398c; *Σ*rec. Ar. *Nub.* 398f. Tongueless mothers: *Σ*vet. Ar. *Nub.* 398d. Goats: *Σ*ad Apoll. Rhod. 4. 257–62c; *Suda* β 229 s.v. *βεκεσθαι* (and *Σ*vet. Ar. *Nub.* 398b). Single child: Claudian, *In Eutropium* 2. 251–4; *Σ*Thomas-Triclinius Ar. *Nub.* 398b; *Σ*rec. Ar. *Nub.* 398f; *Σ*vet. Ar. *Nub.* 398c. Silent mother(s): *Σ*rec. Ar. *Nub.* 398e; *Σ*Tetz. Ar. *Nub.* 398a; *Σ*Thomas-Triclinius Ar. *Nub.* 398b.

⁶⁸ See Borst 1957, *i passim*; Rubin 1998; Eco 1995, 74–6, 113–14; Katz 1981; Olender 1992, 1–5 etc.

⁶⁹ Salimbene (Holder-Egger 1905–13, 350): *volabat enim cognoscere utrum Hebreum linguam haberent que prima fuerat an Grecam vel Latinam vel Arabicam aut certe linguam parentum suorum.*

Frederick's experiment seems to have been well known. Some two generations after Frederick's trial, in 1290, we find a written exchange between two Jewish scholars, Hillel (ben Samuel) of Verona and Zerariah (ben Shealtiel Gracian) of Barcelona, on which language an isolated child raised by mutes or silent nurses would first speak. Hillel of Verona argues that the child after some initial stammering will speak Hebrew, while Zerariah of Barcelona thinks that such children would bark like dogs. Zerariah also includes an interesting argument against the very concept of a primordial, innate language, stating that if there were such an original inborn tongue, then everyone should be able to speak this first language, without ever hearing or learning it.⁷⁰ (This is an argument which could be applied to *Psammetichus'* Phrygian-speaking children as well.) In another Jewish scholarly text we hear of a king who challenges Jewish sages on the primacy of Hebrew. He is then instructed by them to isolate two children from birth, raise them in silence, and subsequently test them at the age of 7 to see if they can speak Hebrew. The king takes two Jewish children, a boy, whom he circumcises, and a girl, and places them in a dark room. Unusually for tales of this kind, the monarch is said to care for the children's needs himself, in silence. When they are 7, the king addresses the youngsters in Hebrew and they are able to respond fluently in that language. The king of this tale then performs a second such trial—a control of sorts—with non-Jewish children, and the result is said to be that the uncircumcised boy can use only sign language, while the girl speaks Hebrew!⁷¹

James IV, our next historical king, took two young children for his linguistic experiment, and had a mute woman care for them. He provided them, as we have seen, with relatively opulent soundings, but the alleged results—Hebrew-speaking children—were already questioned by the source reporting on the Scottish king's trial. The third historical royal experimenter, the Indian Moghul emperor Aqbar the Great did not expect the children in his trial to acquire

⁷⁰ See Blumenfeld 1857, 135–6 (in Hebrew). Hillel's pupil Abraham Abulafia—whose ideas on language may have influenced Dante—will argue that Hebrew was undoubtedly the world's first language but it is nonetheless ridiculous to argue that such children will speak Hebrew. See Eco 1995, 49–51; Idel 1989, 14–15 with nn. 73–5 on 146–7.

⁷¹ This tale is found in a commentary on the famed medieval scholar Rashi (1040–1105) by Ovadiah the Prophet, a scholar of unknown date—see Lieberman 1980, 319–20 (in Hebrew) and see Idel 1989, 147 n. 75.

any form of speech. His aim was not to find the world's original language or the children's first form of speech but rather to demonstrate that children learn to speak from listening to others. He raised infants in silence in order to demonstrate that the children would remain dumb. Aqbar does not choose his children at random, the way *Psammetichus* does. He is said to have purchased some twenty children from their indigent mothers and housed them in a large building. Aqbar provided the children with a society of soundless caretakers: silent guards and tongue-tied wet-nurses. From a contemporary Persian account we learn that after four years 'they had no part of the talisman of speech and nothing came out except for the noise of the dumb'.⁷² These results are by far the most convincing of those furnished by the royal experiments. It is possible that such 'noise of the dumb' included gestures and signs: an early eighteenth-century account states that Aqbar's speechless children learned sign language from their mute caretakers.⁷³

Feral Children

There are a great many other reports of children who were brought up without the sound of speech. These youngsters are not subjects used in experimental trials, but abandoned children who grew up in the wild. Feral children raised without language are the products of natural experiments, so to speak. Unlike the children of the royal trials, they were not deliberately sacrificed upon the altar of science, but were left to fend for themselves in the wild by accident or, at times, by the design of their families. Reports on such children, who were often nurtured by animals, date back to the fourteenth century. Accounts of children of the wild become—perhaps suspiciously—prominent in the eighteenth century, when Enlightenment anthropology, with its interest in man caught between nature and society, was at its height.⁷⁴ Wild children isolated from society seem to be an excellent testing ground for providing answers to a

⁷² The quotation is from the *Akbarnama* of Abu'l-Fazl as cited by Crystal 1997, 230. Sulek 1989, 647–8 quotes a different account of the experiment, in which it is added that many of the children 'became the nurselings of mother earth'.

⁷³ See Borst 1963, iv, 2050 (Nachträge). This source, dating to 1705, does not correspond altogether to the two earlier reports on the experiment (above, previous n.), and states, for instance, that Aqbar isolated 12 children for 12 years.

⁷⁴ Malson 1972, 80–2 has a convenient list of 53 recorded instances of feral children dating from 1344 to 1961; see too Crystal 1997, 291; Danesi 1993, 3 includes an addition to the list, the Burundi boy. For the 18th-cent. 'explosion' of interest in such children see Formigari 1974, esp. 279–80.

series of questions on the basic nature of man.⁷⁵ Are humans born human or made human by society? Would man in a state of nature be more than an ignoble savage? Are ideas innate in people? Is language? Wild children, infants, and youngsters, who were abandoned to nature, reduced to a feral state, and then returned to civilization were observed—and taught—in an effort to discover the answer to some of these questions.⁷⁶

How do these historical feral children compare with *Psammethichus' children*? Few of the children featuring in reports could stand upright when first discovered and none had any language to begin with: many subsequently learned to walk, but only a few acquired speech, despite their teachers' efforts.⁷⁷ *Psammethichus' two children* who not only speak but also fall upon the shepherd—from an erect position—are exceptional and do not fit this pattern. The two most interesting cases of wild children from our point of view are Victor of Aveyron and the two sisters Amala and Kamala of Midnapore. The two girls were raised by wolves with cubs, as cubs, and were aged one and a half and eight and a half when they were discovered in the forest in 1920. The younger sister, Amala, died fairly soon after being brought to an orphanage, while Kamala survived for another eight years and eventually learned to speak in rudimentary fashion. These sisters who lived together among wolves and were never completely isolated are the only recorded instance of *two* feral children who spent their time in the wild together and in that sense they come closest to reproducing the conditions outlined in the Herodotean experiment. The two girls certainly did not spur one another to speech, but this is not surprising, since they grew up among wolves and the younger sister was virtually a baby when she was discovered, probably too young to talk.

Victor of Aveyron is a particularly interesting child of the wild because his story is so well documented. Jean Itard, the doctor who attempted to understand and educate this *enfant sauvage*, kept detailed (and intelligent) records of the process. Young Victor had spent many years on his own in the forest and was brought to civil-

⁷⁵ Indeed, wild children remain an object of interest and controversial source of knowledge on the acquisition of language in our own times—see e.g. Pinker 1994, 291–2 vs. Sampson 1997, 87–9 on 'Genie'.

⁷⁶ See the interesting discussion in Lane 1976, 19–29.

⁷⁷ See Malson 1972, ch. 2 esp. 47–8.

ization in 1799, aged about 12. Itard tried to teach Victor to speak. The boy, who originally only reacted to sounds connected to food or to his confinement, gradually began to pay attention to human voices. He learned to respond to his name and could produce some vowel and consonant sounds, but he remained mute and never learned to articulate more than a few near-words. Victor did develop a whole series of signs and gestures in order to communicate with others and he responded to their gestural language. He also learned to recognize some written names, adjectives, and verbs and eventually wrote himself.⁷⁸ Itard's work with Victor reinforced his conviction that humans are not born human but are the product of society. In his report on the wild boy of Aveyron, he suggests a hypothetical experiment along the lines of *Psammethichus' trial* which would underline just how feeble humans are in their natural state. 'I have not the least doubt that if we were to insulate at the earliest period of infancy two children, the one male and the other female, and were to do the same with two quadrupeds, chosen from the species of brutes that was the least intelligent, these latter would shew themselves much superior to the former, in the means of providing for their wants and in taking care either of their own preservation or that of their children.' While Itard does not speak of the acquisition of language here, it is plain that he would not expect two such infants to speak.⁷⁹

Enlightenment Conjectural Histories: Condillac and Others

Condillac

Itard was a follower of Étienne Bonnot de Condillac (1715–80) and attempted to educate Victor in accordance with Condillac's theory of the development of human understanding, beginning with an attempt to awaken the boy's senses. Itard's hypothetical trial involving two isolated children may also have been influenced by Condillac, for in his writing Condillac uses a thought experiment involving two secluded infants and his experiment, like that of *Psammethichus*, is concerned with the origin of language. Condillac is one of a series of Enlightenment thinkers who include scenarios of

⁷⁸ Itard's two reports on the wild boy of Aveyron were first published in 1801 and 1807. Itard in Malson 1972, 116–26 and 166–8 is a description of Victor's acquisition of language; see too 127–36, 147–50, 158–9, 162–5 and Malson's own summary at 71–80. See too Lane 1976, 111–16, 139–54, and above, n. 46.

⁷⁹ See Itard in Malson 1972, 138 n. 10 (and 36); see also 99 and 180–1.

an isolated primordial pair as a part of their analysis of the origin of language and other civilized arts.

The theoretical variations on Psammetichus' experiment formulated by Condillac and others are perhaps more interesting and useful than the actual attempts to reproduce the Egyptian king's trial which we have encountered so far. Thinkers who share the scientific interests of Psammetichus and the other experimenting kings, but lack their royal prerogatives, need to carry out their test of youngsters in thought alone. These hypothetical trials have none of the wear and tear—and cruelty—of actual experiments and their results are inventive, useful, and no less plausible. We have already looked at an elegant Greek linguistic *Gedankenexperiment* going back to the early fourth century BCE, where the anonymous author of the *Dissoi Logoi* sent off (in thought) a Greek infant to Persia and a Persian baby to Greece. This hypothetical trial not only disproved the contention that a specific language is innate or that the first language a child speaks is related to her race; it demonstrated that a child acquires language from her surroundings.⁸⁰ More modern thought experiments often use their isolated children in a similarly productive and stimulating way. At the same time there is a weakness in these linguistic thought experiments: if Psammetichus and the other actual experimenters arrive at times at unexpected results, there is no danger of that happening with armchair trials. Thinkers who engage in hypothetical trials can obtain precisely the results they desire. A good instance of the wishful thinking that can be couched as a thought experiment is supplied by the Sevillian humanist Pedro Mexia (c. 1495–1551), a contemporary of Erasmus. He argues that the children of Psammetichus' experiment speak 'goatese' and adds that if two youngsters were raised in the desert they would end up speaking Hebrew to one another. Whoever is very curious about these matters, Mexia adds, can repeat the experiment, but it is clear that thought suffices for him.⁸¹ Such argumentation can scarcely be termed a rigorous experiment.

Let us return to Condillac and his Enlightenment contemporaries. Thinkers in the eighteenth century devoted a great deal of attention to the origin of language. 'It is safe to say that no other century has debated that question with greater zeal, frequency,

⁸⁰ See further Gera 2000, 22–8.

⁸¹ See Borst 1960, iii/1. 1142; see too 1387 and 1961, iii/2. 1752. See too Launay 1980, 412–13 (who refers to Mexia as Pierre Messie).

consistency, and depth of insight.'⁸² The relation between language and thought and language and society were favourite themes of the Enlightenment.⁸³ Such deliberations were part of an interest in the wider question of the nature of humans. We have already seen that eighteenth-century thinkers sought to define the difference between men and animals, and to determine the extent to which humans are a product of culture rather than nature. Thus when Enlightenment thinkers turned to trials meant to discover the origin of language they were interested in the broader consequences of the inquiry and in this respect they resemble Psammetichus. The Egyptian king investigated the world's first language in order to resolve the weightier question of Egyptian primacy. He performed his linguistic experiment because he was unable to come up with any other means of establishing the identity of the world's first people. Subsequent ancient versions of the trial will preserve this emphasis on using the children as a means of determining the world's oldest people, rather than establishing a point about language as such.⁸⁴ It is only later that the experiment was viewed chiefly in terms of its linguistic implications. The Enlightenment investigations into the origin of language were similarly intended to provide answers to more general questions about reason, society, and culture. Condillac, for instance, was interested in the origin of language because he saw humans' uniqueness in relation to other creatures in their ability to reflect, and reflection, the connection of ideas with one another, depended, in his view, on proficiency in the use of language. The ultimate aim behind Condillac's inquiry into the origin of language was to investigate the nature of thought: progress in language, he thought, was the key to the progress of the human mind.⁸⁵

Psammetichus' experiment was, in a sense, an unnecessary initiative, because no one had doubted that the Egyptians were the first people until he performed his trial. When Enlightenment figures discuss the origin of language they too attempt to answer a question which in the eyes of many of their contemporaries need not have been raised, for the common view was that language was a divine gift

⁸² Aarsleff 1982, 147.

⁸³ See Formigari 1974; Schreyer 1978, 15–17; Aarsleff 1982, *passim*.

⁸⁴ In Hdt.'s phrasing οἱ τῶν γυναικῶν παῖδες (2. 2). *Σ* ad Apoll. Rhod. 4. 257–262 calls this the question of who were γυναικῶν; other scholiasts (e.g. *Σ* vet. Ar. *Nub.* 398d; *Σ* Tzet. Ar. *Nub.* 398a) see it as a quarrel or contest between various nations over ἀρχαῖα. See Vannicelli 1997, 210–11 for further discussion and references.

⁸⁵ See Aarsleff 1982, 163–4 and *passim*; Harris and Taylor 1997, 144–50.

to humans. This meant that Condillac and his contemporaries needed to acknowledge—or perhaps pay lip service to—the biblical concept of an original, god-given language before turning to their own accounts of how language was invented.⁸⁶ Here we see the advantage of using Herodotus' account of *Psammetichus* as a starting point for speculations on the origin of language, since the tale is not derived from the Bible and avoids the thorny issue of scriptural authority. *Psammetichus' trial*—unlike, for instance, the biblical story of Adam naming animals—was both stimulating and open to refutation, and that must be one reason why it was so frequently cited by thinkers over the ages.⁸⁷

In book 2 of his *Essai sur l'origine des connoissances humaines* (1746), Condillac imagines two children left on their own in the world: 'Suppose that some time after the deluge two children, one male and the other female, wandered about in the deserts, before they understood the use of any sign.' Condillac suggests that these children, who come together, will use involuntary cries of passion, accompanied by gestures, a 'language of action' (*langage d'action*), in order to express their feelings and needs. One child would gesture or cry out when experiencing some strong emotion and the other, Condillac imagines, would respond sympathetically, having used a similar cry when she felt the same emotion herself. After a time, specific gestures or cries would be associated with particular sources of danger, pleasure, etc. and these signs would be used deliberately rather than involuntarily. Very slowly, articulated words would be used alongside the cries and gestures and then gradually replace them. Condillac suggests that these first children and their offspring—and here we see why the two original children in his hypothetical scenario are specifically said to be a boy and a girl⁸⁸—would not be capable of producing a great many articulate sounds at first. Only gradually would young children in succeeding generations learn to take advantage of their flexible tongues (*Essai* ii. 1. 1–8).

⁸⁶ See Formigari 1974; Schreyer 1978, 20–1; Ricken 1994, ch. 10.

⁸⁷ See Launay 1980. Katz (1981, 134) terms Hdt. 2.2 'the classical testimony that captured the imagination of early modern Europeans', but adds that *Psammetichus' experiment* 'was for most early modern English scholars important but not conclusive empirical evidence'.

⁸⁸ Compare Katz 1981, 135 who quotes a report on a French philosophical conference (1665) where it was argued that *Psammetichus* erred by using two boys [*sic*]. If a boy and girl had been used, these French thinkers claimed, the girl would have spoken first, because of women's facility for speech.

Condillac's expectations concerning the speech of isolated children differ radically from those of *Psammetichus*. The Egyptian king believes that language is innate, while Condillac is explaining the gradual evolutionary invention or creation of language. *Psammetichus' isolated children* are real, youngsters of his time and place, while Condillac's imaginary ones live 'sometime after the deluge', that is, Noah's flood. Yet Condillac's two children—a pair of isolated infants who are used to explore or retrace the first language—clearly owe a great deal to Herodotus. At the same time there are other influences at work. Condillac terms his *Essai* a supplement to John Locke's *Essay on Human Understanding* and Locke already uses the conduct of imaginary children on a desert island as a basis for an argument.⁸⁹ Condillac was also acquainted with several contemporary reports of feral children and these too may have inspired his scenario of abandoned children.⁹⁰ An earlier writer, Bernard Mandeville (1670–1733), also used an imaginary 'wild couple' in his hypothetical reconstruction of the origin of language and it is likely that Condillac was acquainted with his work.⁹¹ The primordial or 'savage pair' found in Mandeville's *Fable of the Bees* (1728) are without language but have no need of speech. They find it difficult to pronounce various sounds, because their tongues are inflexible, and they express themselves with gestures and looks rather than speech. After many years spent together, the wild pair slowly communicate by means of sounds as well. Their children whose vocal organs are more flexible add further sounds (either accidentally or deliberately) and subsequent generations continue to add to spoken language.⁹² It is worth noting that Mandeville's primordial couple are presented throughout as adults, rather than isolated children, and they seem more a pagan version of Adam and Eve than a variation on *Psammetichus' children*. Locke, actual feral children and Mandeville's imaginary wild pair, then, may all lie behind Condillac's children, but in view of the wide and sustained interest in *Psammetichus' experiment* we can probably assume

⁸⁹ 'I doubt not but if a colony of young children should be placed in an island where no fire was, they would certainly neither have any notion of such a thing nor name for it, how generally soever it was received and known all the world besides.' J. Locke, *Essay Concerning Human Understanding* (1. 3. 11).

⁹⁰ He writes in *Connoissances* i. 4. 23 of a Lithuanian bear child; see Malson 1972, 38–40 and 80–1 for further references to wild children in Enlightenment writers such as Rousseau.

⁹¹ See Schreyer 1978.

⁹² See Mandeville in Kaye 1924, ii. 284–90.

that Herodotus' tale was the chief source of inspiration.⁹³ Already in 1578, the doctor Laurent Joubert (1529–83) interpreted the Egyptian king's experiment in a manner similar to Condillac's approach: he took *bekos* to mean that the children had created a new language. Joubert saw *Psammetichus' children* as a nuclear society of two and suggested that the youngsters invented a language of their own, out of necessity, just as Condillac's children will do later on.⁹⁴ Joubert is one of several Renaissance scholars who recast the modal form of *Psammetichus' experiment*, analysing Herodotus' factual report, written in the past tense, by turning it into a hypothetical trial written in conditional form.⁹⁵ We have encountered this kind of transformation—in form and substance—from reported account to thought experiment already in the *Dissoi Logoi*. Condillac's scenario using two imaginary children is composed along similar lines and his youngsters are plainly intellectual descendants of *Psammetichus' children*.

Maupertuis, Rousseau, Smith, and Herder

Condillac's ideas on the origin of language were extremely influential and later writers would return to his scenario of two isolated children.⁹⁶ One such Enlightenment thinker was Pierre Maupertuis, the cosmopolitan president of the Berlin Academy from 1746 to 1759. Maupertuis attempted to bring all humanist and scientific disciplines under one roof. He wrote a composition on the origin of language, but his version of the exposed children experiment appears in his *Lettre sur le progrès des sciences* (1752), a wide-ranging essay on the directions scientific research should take. Maupertuis first proposes that two or three children should be brought up in isolation so that philosophers can discover the world's original language, limited though it might be. He then suggests a second experiment where several societies of such children are formed, with each society composed of children whose parents

⁹³ An acquaintance with *Psammetichus' experiment* is widely attested in the learned writings of Renaissance and early modern Europe; see in addition to the references cited in n. 1 above, Launay 1980 (on 16th cent.); Katz 1981 (on 17th cent.); Genette 1995, 367 n. 30.

⁹⁴ See Launay 1980, 413–14.

⁹⁵ See e.g. 'Mais les enfants qui seroient en telle compagnie, il est vraisemblable que pour communiquer ensemble . . . il imposeroient des noms . . .'. See Demonet-Launay 1993, esp. 23–6; Launay 1980, 413 also has this quotation from Joubert.

⁹⁶ Aarsleff 1982, 148; Ricken 1994, 140; contrast Schreyer 1978, 17.

speak widely differing languages. His intent was to see whether there was one or several original languages. This trial would provide information not only about the origin of languages, but about the origin of ideas themselves, according to Maupertuis.⁹⁷ Ten years later Samuel Formey, secretary of the Berlin Academy, will propose a similar experiment, involving two generations of isolated humans. In the first generation a dozen children of the same age are to be isolated, and cared for physically, but kept from any acquaintance with speech or the arts of civilization. These children will grow, reproduce, and need to take care of their young. Formey argues that such parents of the wild will not know how to feed their children, let alone invent a language.⁹⁸

Rousseau was influenced by Condillac, both adapting and criticizing his ideas.⁹⁹ In his description of the beginnings of speech found in the *Essay on the Origin of Languages*, Rousseau also uses a primordial pair of sorts, but they are not an isolated couple left to fend for themselves in a barren place. The two are members of a larger society, a people who live in a fertile land with a mild climate. Rousseau pictures a young boy and girl meeting at the well and their first words 'aimez-moi' are, as we have seen, born out of pleasure, not need.¹⁰⁰ This loving young pair is not used by Rousseau to demonstrate later stages in the development of language.

Adam Smith, in his 'Considerations Concerning the First Formation of Languages' (1761), uses both savages and children when discussing the formation of language. He begins with the by now familiar scenario of 'two savages who had never been taught to speak, but had been bred up remote from the societies of men'.¹⁰¹

⁹⁷ Maupertuis's 1752 *Expériences métaphysiques*, part of a larger work entitled *Lettre sur le progrès des sciences* (Lyon, 1768, repr. Olms, 1965) ii. 429–30. See Aarsleff 1982, 183–4; Grimsley 1971, 2 with n. 3.

⁹⁸ 'Review of the Principle Means Employed to Discover the Origin of Language, of Ideas, and of Human Knowledge' (Réunion des principaux moyens employés pour découvrir l'origine du langage, des idées, et des connoissances des hommes) delivered in 1762 and printed in his *Anti-Émile* (1763). See Stam 1976, 109 (and 278 n. 28); Aarsleff 1982, 191–2.

⁹⁹ See e.g. *Discourse on Inequality* i (Masters 1964, 120–1 = Starobinski 1964, 146–7); see also Stam 1976, 80–2; Aarsleff 1982, 156–7.

¹⁰⁰ Rousseau, *Essay*, chs. 10–11. There is no such couple in Rousseau's other outline of the beginnings of language found in his *Discourse*—see above, Sect. 2.2.

¹⁰¹ Smith in Bryce 1983, 203; the 'Considerations' subsequently appeared as an appendix to *The Theory of Moral Sentiments*. Smith was acquainted both with Mandeville's *Fable* and Condillac's *Essai*—see Stam 1976, 38–42 and Bryce 1983, introd. 23–7 and 203 n. 2.

Smith does not mention the age or sex of these savages and does not put them through their paces in order to outline the origin of speech. They are there simply to point to the beginnings of language, for Smith is more interested in tracing the progression of language, once it has begun, and the development of the parts of speech. Here he turns to children, using the speech of modern children as evidence for the development of language long ago. The fact that a 'child that is just learning to speak, calls every person who comes to the house its papa or its mama', is for Smith an indication that primitive humans originally used the names of individuals for whole species,¹⁰² while the fact that a 'child, speaking of itself, says, *Billy walks, Billy sits*, instead of *I walk, I sit*' shows that pronouns were a relatively late development.¹⁰³ Smith's savages are very shadowy figures, while his children live and speak in the here and now.¹⁰⁴ When he uses contemporary children to recreate the language of the past, Smith reminds us of *Psammetichus*, but unlike the king he does not experiment on these children in any way: he simply observes their everyday speech. Condillac also plays a part here, for Adam Smith uses the youngsters to trace the various stages of speech, just as Condillac does, even if Smith's children are not hypothetical beings of long ago.

At first sight, thought experiments are much easier to perform than actual trials, but this is not always true in relation to *Psammetichus*-type trials. Paradoxically enough, the thought experimenters we have encountered are more actively involved with raising their imaginary children than the kings who make use of live youngsters. The royal experimenter simply isolates children and orders others to tend to their physical welfare, leaving them to their own devices for years on end. Those who perform trials in thought must take these hypothetical children through their paces, manoeuvring and manipulating them, in order to recreate or illuminate the processes by which humans first acquired language. In

¹⁰² Bryce 1983, 204. Compare Arist. *Physica* 184^b12–14: καὶ τὰ παῖδια τὸ μὲν πρῶτον προσαγορεύει πάντας τοὺς ἄνδρας πατέρας καὶ μητέρας τὰς γυναῖκας ὑπερὸν δὲ διορίζει τοῦτων ἑκάτερον.

¹⁰³ See Smith in Bryce 1983, 219. Vico, Herder, and others also used children's speech as evidence for the development of language in primitive man; see Danesi 1993, ch. 3 esp. 95 ff.; Berry 1974, 136.

¹⁰⁴ Yet there was an equivalence of sorts, in the 18th-cent. view, between children and savages, i.e. primitive people (of old)—see e.g. Berry 1974, 136; Schreyer 1984, 333–4; Simone 1998, 206–8 and see further below, Sect. 5.2.

some of these complex scenarios, the children's progress must be monitored well into adulthood. These descendants of *Psammetichus'* children can be very demanding creatures, for even children of the mind, children found in imaginary scenarios, need to be cared for. In his prize-winning essay on the origin of language (1772), Herder attacks Condillac's theoretical use of two children left to their own devices in the desert. Children such as these, Herder argues, must perish or turn into animals. How could they survive in the desert? And how could they possibly be engaged in a mutual exchange from the first moment? 'Of all this I understand nothing', Herder states as a refrain, after outlining each stage of Condillac's scenario.¹⁰⁵ Herder, as we have seen, views language first and foremost as an act of cognition, and that must be why he has no use for a primeval pair of children stirring one another to speech. He uses a single primordial figure instead. According to Herder, a single human invented the first word and this word serves as an act of recognition (of a bleating lamb), rather than an act of communication. He adds, 'The savage, the hermit living alone in the forest, would have had to invent language for himself, even though he has never spoken it. It was an agreement of his soul with itself and so necessary an agreement as it is necessary that man is man.' Herder does not think that post-diluvian isolated children or wolf children can teach us anything about the origin of language, arguing that aberrations are poor guides to a species as a whole.¹⁰⁶ Yet it is possible that Herder's bleating sheep—the phenomenon which stirs the first man to speech—owes something to Herodotus' goats.¹⁰⁷

Modern Versions of Psammetichus' Experiment

There were many more discussions, analyses, and reworkings of *Psammetichus'* experiment in the eighteenth and nineteenth centuries.¹⁰⁸ In the twentieth century the influence of *Psammetichus'* children is most apparent in a variety of thought experiments conceived by modern researchers. In three recent works on linguistics

¹⁰⁵ Herder in Gode 1966, 99–100. Herder is either unfair to Condillac or unacquainted with Part I of his *Essay*—see Wells 1987, 35–6; Aarsleff 1982, 197–8.

¹⁰⁶ Herder in Gode 1966, 119 and 123 ff.

¹⁰⁷ Cf. Trabant 1996, 46: 'Herder's story is completely and explicitly Adamic, and his Lamb is of course nothing else than the Agnus Dei.'

¹⁰⁸ See e.g. Hewes 1976, 484–6; Borst 1960, iii/1, 1317; 1961, iii/2, 1447 and 1764–5; Genette 1995, xxxvii, 123, and 367 n. 30; Harris 1996, 9–10 and 50–6 for references to some of the more interesting instances.

and the origin of language, the following three experiments are outlined.

Picture two married couples who belong to the most highly advanced culture imaginable. Each of the four people have achieved the highest degree of intelligence possible with respect to all the other denizens of their culture. The four are in a boat in the middle of the ocean. Both of the females are pregnant, and it so happens that they give birth at exactly the same instant to two healthy babies. As soon as the babies see the light of the day, the four adults fall overboard and drown. This means that the neonates, who were born of the best possible 'genetic material' have not had any contact whatsoever with other human beings. Fortuitously, the boat reaches the shore of an island on which no other human being had set foot. The babies are mistaken as cubs by a pack of wolves. The wolves proceed to take the human neonates into their care and to nurture them as they would any cub. Untouched by human beings and culture, will these 'human' neonates develop speech spontaneously in the same way that they would develop a physical organ? Or would their progeny have to reinvent speech *tabula rasa* over many centuries of serendipitous happenstances?¹⁰⁹

Take an infant born to parents of completely homogeneous monolingual linguistic background going back . . . ten generations; remove the child at birth and place him/her with adoptive parents whose own language, and that of the entire surrounding community, is . . . completely unrelated to the language of the child's biological parents and ancestors. Linguists will predict that the child will learn the language of his/her adoptive community as fast and as easily as s/he would have learned the language of the biological parents.¹¹⁰

Take four families speaking four divergent and unrelated languages, leave them in a desert island with all the necessities of life, give them a basic lexicon of 200 words for most elementary things and actions and expect the development of a new natural language.¹¹¹

All three of these hypothetical trials, were formulated in the last dozen years in attempts to solve three different problems relating to original or first languages, and all have their roots in Herodotus' tale. There are many more such adaptations of Psammetichus' trial, in thought, by contemporary researchers.¹¹²

¹⁰⁹ Danesi 1993, 2–3, who refers to an unknown author of this hypothetical scenario and terms the trial a paraphrase of one of the oldest and most ingenious ever imagined (clearly referring to Psammetichus' trial, which he discusses shortly thereafter).

¹¹⁰ Thomason (1991, 248–9) puts forward this thought experiment, which is intended to test the theory that children are genetically predisposed to learn a specific language, not just language in general.

¹¹¹ Nocentini 1992, 469, referring to an experiment proposed by Bickerton and Givón. He adds, 'unfortunately the subjects refused the project . . . and terms this kind of trial a 'forbidden experiment'.

¹¹² See too Hewes 1976, 488: 'An imaginary Psammetichus experiment, affecting

4. ANCIENT REACTIONS TO THE EXPERIMENT

In conclusion, let us return to the ancient world and Psammetichus' original experiment. Herodotus' account of the experiment performed by Psammetichus immediately left its mark upon Greek readers. Indeed, the story may have been well known even before Herodotus, for he records—and ridicules—an alternate version. This variant version, which as we have seen above, Sect. 1, may stem from Hecataeus, states that the children were raised by women whose tongues were cut out. It is interesting that more than one woman is said to be involved: perhaps it is the children's mothers who care for the infants. These mute women surely breastfed the children and it is possible that they lived with the youngsters, forming a family of sorts. This version provides no natural explanation for the results of the experiment: if there were no bleating goats where did the word 'bekos' come from? Psammetichus is also painted here in even darker hues, for the king cruelly deprives the women of the power of speech, in addition to using the children as experimental creatures.

Aristophanes provides evidence for the immediate popularity of Herodotus' tale. In the *Clouds* (398), Aristophanes has Socrates coin the compound *βεκκεσέληνε* 'babbling prelunar idiot', when referring to Strepsiades' primitive ways.¹¹³ The first half of this unique term, *βεκκε*, seems to be a reference to the word *bekos* of Psammetichus' experiment: ancient scholiasts who comment on Aristophanes' text link the *bekke* of the *Clouds* to the *bekos* of the linguistic experiment. This would mean that for Aristophanes' original audience the tale was quite notorious—the very half-word *bekke* suffices to hint at this story of primeval language.

The scholiasts who explain Aristophanes' text provide a series of variations on Herodotus' report. In their various accounts, different elements in the story are changed: the identity of the king who

all infant members of our species (and eliminating their elders, while still permitting the infants to survive and grow up) would obviously set hominids back to square one, in spite of the superb cortical and vocal tract adaptations our ancestors have evolved for us.' Also Hewes 1976, 493: 'I doubt if the progeny of a hypothetical pair or group of present day *Homo sapiens sapiens* protected from any contact with an ongoing language system, would re-invent speech in less than many thousand generations, and the attainment of a gestural system might require most of that time.'

¹¹³ Sommerstein's translation (1982, 49 and 182). The second half of the word is thought to be a variation on the epithet *προσέληνος* meaning older than the moon.

performs the experiment, the number of children involved, the age when the children produce their first word, the caretakers who tend to the children, the world's original language, etc. In essence, though, none of these variant accounts is all that different from Herodotus' original story and all seem to stem from his *History*.¹¹⁴ The perspective, too, remains the same: the chief problem to be resolved in all these variant versions is the identity of the world's first people. The question of the world's first language remains a side issue, a heuristic means of arriving at an answer to the main question. Indeed, there does not seem to be a single instance in classical literature of an individual interested in the identity and nature of humankind's original language *per se*.

We have seen that the linguistic thought experiment found in the *Dissoi Logoi* is an early—and sceptical—reaction to Psammetichus' trial, refuting the idea that language is innate. In this sophistic text, probably composed some dozens of years after Herodotus' own work, the author is interested in the question of a first language, but his focus is different. The writer of the *Dissoi Logoi* discusses not the identity of the world's first language but the way in which language is first *acquired*. He argues that we learn language from the community at large, without having any specific teachers of speech (6. 12). The identical claim appears in two slightly later dialogues of Plato as well, in the *Protagoras* (327e) and the *Alcibiades* (1. 110d–111a). Both the sophist and the characters in Plato's two dialogues, Protagoras and Alcibiades, turn to language learning because of their interest in—what they argue is—a parallel question, the acquisition of virtue. Protagoras in Plato's *Protagoras*, Alcibiades in the *Alcibiades I*, and the author of the *Dissoi Logoi* all point to the analogy between learning virtue and learning Greek: both, they claim, are acquired from earliest childhood, from the general community, with no one specific teacher responsible for the process. We learn language (and justice) without knowing who our teachers are.¹¹⁵

The means by which virtue can be acquired—the question if virtue can be taught, and if so, by whom—was a much-debated issue in the fifth and fourth centuries BCE. While the parallel inquiry raised in these texts, that of language acquisition, may not have been equally compelling, these discussions indicate that the question was

¹¹⁴ See Vannicelli 1997, 209–12 for a convincing demonstration of this point and see Golden 1995, 11–12.

¹¹⁵ See further below, Sect. 4.3.

aired at the time.¹¹⁶ The problem of how children learn to speak clearly interested the Greeks of the classical period and the answer supplied by the *Dissoi Logoi* and by the Platonic speakers is one that we too would accept, namely that children pick up speech from their environment, without conscious learning or a specific teacher.¹¹⁷ What Psammetichus does in his experiment is to remove the environment, the surrounding society, from which children normally learn language. The king then expects to hear the world's first—and innate—language. What would the author of the *Dissoi Logoi*, and the Platonic Protagoras and Alcibiades expect to hear from Psammetichus' children? If they are consistent in expecting language to come from one's surroundings, they should expect silence, if the children hear no speech, and bleating (or *bekos*) sounds, if the children are exposed to goats.

After performing his experiment Psammetichus concludes that Phrygian was the world's first language, while Egyptian was the second. We do not know on what basis—other than national pride—the king decides that his own language must have been second. Nor do we have indication as to how (or in what order) other, additional languages arose. In any event, according to Herodotus' story, at best, Greek can only be the world's third oldest language.¹¹⁸ In the *Dissoi Logoi* experiment the primacy and uniqueness of the Greek language are also far from apparent. When the author of the *Dissoi Logoi* notes that a Persian baby can learn Greek with the same ease as a Greek infant, while a Greek child loses his Greek speech by being transported to Persia, he seems to do away with the usual qualitative distinction made by the Greeks between their language and barbarian tongues. The thought experiment proposed by the sophist indicates that there is no essential difference between (learning) Greek and Persian: both are simply different human languages spoken in different places. Elsewhere in his work (ch. 2) the author stresses the relative value of customs and practices, and points out that what is considered seemly by one ethnic group is considered

¹¹⁶ See Harrison 1998, text near n. 151, who finds in Herodotus' discussion of the relationship of languages and Psammetichus' experiment 'the half-digested fragments of a broader Greek debate'.

¹¹⁷ See e.g. Pinker 1994, 39–45; Crystal 1997, 236–7. Crystal mentions the significant role played by 'motherese', but notes that special child-directed speech is not found in every culture.

¹¹⁸ Pace Lloyd 1976, 5 and cf. Harrison 1998, text near nn. 150–1. Harrison points out that in the *Cratylus* (425e–426a; cf. 421d) some barbarian words are said to be older than Greek.

inappropriate by another. Thus—to cite one of his more sensational examples—the Scythians find scalping one's dead enemy and drinking wine from a cup made from his skull perfectly respectable, while Greeks would not be seen in the company of such a person (*Dissoi Logoi* 2. 13). This sophistic author is eager to point to the two sides to every question in his *Twofold Arguments*, and his hypothetical linguistic trial leads to the conclusion that languages—like customs—are in essence conventional, the product of one's society. This does not necessarily mean that all customs and all languages are of equal worth, but such arguments do set specific practices—and individual tongues—in a wider comparative perspective.

Psammetichus' trial left its impression on Romans as well. Quintilian refers to the experiment when he argues that speech is learned through the ear, so that infants raised in solitude could not have acquired the faculty of speech. *Propter quod infantes a mutis nutricibus iussu regum in solitudine educati, etiam si verba quaedam emisisse traduntur, tamen loquendi facultate caruerunt* (10. 1. 10). Here Quintilian describes the experiment rather loosely, without mentioning either Herodotus or Psammetichus, but simply the directives of kings. He also allows the children the command of several words (*verba quaedam*), rather than just one, even when denying them any real form of speech. The phrase *mutis nutricibus* is ambiguous, for it may refer either to the inarticulate goats or to the mute wet-nurses and we cannot be sure which version of the experiment Quintilian is referring to here—he may have remembered the passage from Herodotus only vaguely.

We have seen that various thinkers envisioned the world's first language in very different ways. In the eyes of some, this primeval tongue was a language of harmony shared by a wide variety of creatures. Others imagined an Adamic language where words reflect the essence of the objects they denote.¹¹⁹ On the other end of the scale we find primeval language depicted as a primitive and undeveloped form of speech. Virtually all the later European thinkers whom we have looked at see language as developing slowly from simple beginnings, with the original language a simple and limited form of communication. That is why children are used by these thinkers to

¹¹⁹ Or this early language, if not actually Adamic, was thought to be well formed, structurally regular, and capable of expressing the highest concepts, as in Friedrich Schlegel's depiction of Sanskrit—see Morpurgo Davies 1998, 68–9.

reconstruct the beginnings of speech: if language was originally developed by primitive, childlike human beings of a fairly limited mentality, children can help reconstruct their ways. Psammetichus' children, it should be noted, have a different role: they simply reproduce the world's first language with no hint of the way that language came to be. We shall see below, Sect. 5.2, that in Herodotus' *History*, foreign languages are generally fashioned in accordance with those who speak them. Yet Phrygian, as a primordial language, is not at all interesting or revealing: Herodotus does not characterize the language in any way and it seems to be simply an ordinary civilized tongue of ordinary civilized people. We should perhaps conclude from this that in Herodotus' view, the world's first people were cultured, but essentially ordinary. The most outstanding quality of Phrygian, humankind's original language, is a negative one, belying expectations: the world's first language is not Egyptian and it is not a particularly primeval form of speech.

In conclusion, Psammetichus' experiment is a complex, paradoxical affair. On one level, the experiment was a huge failure. The reasoning underlying the king's trial is absurd and his alleged results are incredible. If the experiment ever took place, the king himself must have been sorely disappointed by its results and the youngsters he used may have never recovered from the experience. Yet, on a deeper level, the level of conjectural or philosophical history, Herodotus' tale could not have been more significant. Fewer individuals have left a stronger mark on the history of linguistic thought than Psammetichus and his children.

The Invention of Language

Who invented language? In ancient accounts of the age of Kronos language is taken for granted, with human speech simply present from the very start of that ideal time. Very little attention is paid in tales of the golden age to the beginnings of the primeval human beings who live in close communion with the gods, and even less notice is given to the origins of their speech.¹ This is not true of the chief alternative model used by the Greeks to describe the original state of humankind, that of primitive men who originally resemble animals and subsequently acquire the arts of civilization.² Accounts of human progress are an important source for speculation on the origin of language, since speech is often—but not always—included as a significant step in the acquisition of civilization. In such progress accounts we encounter primeval men before they have developed into civilized, speaking human beings. We accompany these beastlike creatures as they develop into full-fledged, articulate human beings, and observe, at times, how they acquire language after a period of initial speechlessness. If in the golden age we know only of the *possession* of speech, in progress accounts we learn of the *acquisition* of language. There is often a before and an after, a pre-linguistic and post-linguistic stage, in narratives telling of man's progressive ascent from lowly beginnings. Consequently, when looking at the varied accounts which tell of humankind's primitive, primeval state and the subsequent establishment of civilization, we can ask a whole series of questions relating to the origin of language,

¹ See above, Ch. 2, *passim*.

² Ukkull-Gyllenband 1924; Lovejoy and Boas 1935; Havelock 1957; Guthrie 1957 esp. ch. 5, and 1969, iii. 60–8, 79–84; Cole 1967; Gatz 1967; Edelstein 1967; Dodds 1973; Conacher 1980, 82–97; Blundell 1986, esp. ch. 7, all discuss ancient theories of progress. Gatz 1967, 144–6 presents a salutary warning about distinguishing too sharply between these two models—a descent from a golden age and an ascent towards civilization—and notes that a whole series of ancient writers make use of both approaches in different writings; see too Blundell 1986, 105–6.

questions which were not relevant to golden age accounts. Was a god, a man, or a group of men the source of human speech? Which of the arts and techniques of civilization preceded the acquisition of language and which came after speech? Was language acquired all at once or only gradually, in stages? Where did words come from? In this chapter we shall look at the wide spectrum of answers given to these questions, answers found in a variety of ancient narratives telling of the development of human civilization and speech.

Ancient progress narratives are presented in rather different forms. There are *Kulturgeschichte* texts, offering a hypothetical 'historical' reconstruction of the life of early man. These analyses of cultural progress, which present a logical, connected account of man's movement towards civilized life, can include a description of the development of language.³ Elsewhere, we find catalogues of inventions or achievements which led to the improvement of man's lot. Such lists do not offer a connected or comprehensive history of civilization, but at times the very order in which human achievements are enumerated can be illuminating.⁴ Here too we sometimes find reference to the invention or acquisition of language. We shall see that discussions of the beginnings of language can also be found in other contexts, having little to do with the rise of civilization. The following survey of ancient sources telling of the invention of language is thematic, rather than chronological.

I. GODS AS INVENTORS OF LANGUAGE

The inventors of language are said to be either gods, individual men, or groups of men. The simplest hypothesis, perhaps, is that a god invented language and granted speech to men. If language is attributed to a divine source, the questions of why or how speech came about need not arise. A god can grant language easily, to all human beings, and such a welcome gift does not have to be examined or explained.⁵ Which ancient sources actually state that speech is a gift of the gods? At first sight, we might expect our earliest texts to state

³ See Cole 1967, 1–13 and 48–50 on the different kinds of progress narratives. Gatz 1967, 230–1 has a vast compendium of ancient references to primitive early men—see his IIa. 5–6. Blundell 1986, 129 n. 2 has a list of pre-Socratic cultural histories, while Cole 1967, 50–6 lists later accounts.

⁴ Compare Cole 1967, 50 n. 8 with Conacher 1980, 86 (and *passim*).

⁵ See Allen 1948, 37: 'The theory of a divine origin represents a more primitive level of thought . . . since it calls for no intellectual speculation.'

that a god invented and gave language to men. The idea of gods as givers of arts goes back to Homer, but in Homer arts are given by deities to specific individuals or to limited groups. Athena, for example, grants good sense and skill in weaving to Penelope and to the Phaeacian women.⁶ It is only in later, post-Homeric sources that we find gods both inventing various arts and transmitting these discoveries to humankind as a whole. In the Homeric hymns, for instance, Hermes invents a lyre, while Hephaestus and Athena teach men to build houses so that they will not live like animals in caves.⁷ In Homer, humans, of course, already possess language, a mortal form of speech, and no mention is made of its source. We do know that this language differs from that of the gods.⁸ There are several instances in Homer of gods granting language and implanting speech in mute, non-human individuals, but these deities do not actually invent language. They grant specific creatures the power of speech, giving them the ability to use a language already created. We have seen that Hera endows Achilles' immortal horse Xanthus with articulate speech (*Iliad* 19. 404–18; see above, Sect. 1.4). The master craftsman Hephaestus grants a human voice (*αὐδὴν*) to his golden mechanical handmaidens (*Il.* 18.419). The power of speech makes these subordinate women more efficient instruments, voiced or speaking tools.⁹ Here we are reminded of a mortal craftsman whose statues are said to speak, Daedalus. Euripides' Hecuba wishes that she could be a statue fashioned by Daedalus with every part of her capable of speech; Daedalus' speaking statues are found in comedy as well.¹⁰ This legendary human sculptor, like Hephaestus and Hera, does not invent language or bestow it on mankind; at best, he grants the power of speech to inanimate objects. In Hesiod, as we have seen, two gods, Hephaestus and Hermes, endow Pandora with human language. Hephaestus places human speech inside her

⁶ *Od.* 2. 116–17; 7. 110–11.

⁷ *Hymn to Hermes* 39–54; *Hymn to Hephaestus* 1–7. See too Pindar, *Pyth.* 12. 6 ff.; Aeschylus, *PV* 442 ff.; Eur. *Suppl.* 194 ff.—the two tragedies are discussed below. Further texts are cited by Kleingünther 1933, 26–39 and O'Brien 1967, 58–9 with n. 6.

⁸ For a discussion of the language of the gods in Homer, see above, Sect. 2.3.

⁹ Compare the animals that are like speaking creatures *ζωοῖσιν εἰκόστα φωνήσαντο* (*Theog.* 584) which Hephaestus fashions on Pandora's golden tiara. Athena and Hephaestus are also said to have built gold statues which sang (Pindar, *Paean* 8. 70–1).

¹⁰ Eur. *Hec.* 836–40 (with 2); Plato *Comicus* fr. 204 K.–A. See Kassell 1983; Morris 1992, 220 ff.; Steiner 2001, 142–3.

(*αὐδὴν*), while Hermes gives Pandora a voice (*φωνήν*) together with lies and deceitful tales. This seems to be a new, specifically human language devised by the gods (*Erga* 61 ff.; see above, Sect. 2.3).

Hermes

Hermes is, in fact, the god most often credited with the invention of language. As the messenger god, he is frequently associated with speech, communication, and interpretation. Hermes is found on thresholds and pivoting doors, and is instrumental in relating inside and outside, including giving external voice to internal thought. He is also offered the tongue in sacrifices.¹¹ Hermes' very name is used to form one of the words for speech, for *ἑρμηνεία* means the expression of thoughts by words.¹² A 'leader of speech, ruler of wise voice', and the 'interpreter of *logos* to mortals', Hermes is a master of communication who is also an expert in devious, persuasive speech.¹³ The god not only equips Hesiod's Pandora with lies and deceit; he uses duplicity in his own affairs as well. In the *Homeric Hymn to Hermes* the very young Hermes first lies to Zeus about stealing Apollo's cattle and then persuades Zeus to allot him a place among the gods. The two brothers Apollo and Hermes are both gods of communication, but are characterized very differently: 'Hermes the mediator and the man of wiles, Apollo the utterer of truth that sped unerringly towards its mark like the flight of an arrow.'¹⁴

What of Hermes as an *inventor* of speech? It is possible that Plato's Socrates refers to this accomplishment of the god in the playful etymology he finds for Hermes' name in the *Cratylus* (407c–408b). Socrates first characterizes Hermes as someone whose activities all deal with speech: he is an interpreter, a messenger, a deceiver, etc. Socrates then derives *Ἑρμῆς*—or the god's alleged original name *Εἰρέμης*—from the words *εἶπειν* (to speak) and *ἐμψαρο* (devised), since Hermes devised speech (*ὅς τὸ εἶπειν ἐμψαρο*). It is worth noting, incidentally, that it is the namesetter or *νομοθέτης* of

¹¹ See Gambarara 1989, esp. 89–91; Padel 1992, 6–8; Vernant 1983, 128–30; Allen 1948, 37 with n. 4; Kahn 1978, esp. 155–6. Eustathius tells us that in sacrifices the tongue is dedicated to Hermes as a bestower of speech *ὡς λόγου δοτῆρι* (*Σ ad Od.* 3. 33a).

¹² See e.g. Xen. *Mem.* 4. 3. 12 and the further references in Sedley 1973, 60.

¹³ *γλῶσσης ἡγεμονία σοφῆς ἰδύτορα φωνῆς* (Nonnus, *Dionys.* 26. 284); *λόγου ἡγεῖται προφήτα* (*Orphic Hymn* 28. 4).

¹⁴ Zaidman and Pantel 1994, 196–7. See too Detienne and Vernant 1978, 41; Clay 1989, 110–11.

the *Cratylus* who is said to have given Hermes his suitable name: if Hermes had invented language we would have expected the god to have named himself. Etymologies aside, Socrates of the *Cratylus* rejects the idea of tracing first names to the gods, seeing this as too easy a solution to the *aporia* of the source of (correct) first words. Socrates compares resorting to the gods when dealing with the origin of earliest words to the tragedians' use of a *deus ex machina* to resolve their difficulties (425d).¹⁵

It is probably only later, from the first century BCE onwards, that Hermes is presented as an inventor of language, presumably as a result of the syncretistic identification of the god with the Egyptian deity Theuth.¹⁶ Diodorus Siculus provides evidence for Hermes as an inventor of language. In the first book of his *Bibliotheca* (1. 10 ff.), Diodorus narrates the mythical history of early Egypt, where man's accomplishments are not the result of a gradual process, but follow from a series of specific inventions by individual inventors. These outstanding inventors are subsequently granted immortality as a reward for their wisdom and service to humanity, according to Diodorus' euhemeristic account; several become kings of Egypt. The originally mortal Hephaestus for instance, discovered how to keep a fire going, and became Egypt's first king. Osiris, the third ruler, caused men to stop their cannibalism and during his reign, Hermes introduced language, writing, music, astronomy. Here it is plain that Hermes is identified with the Egyptian god Thoth or Theuth, who is credited with the invention of writing, the development of language, mathematical calculations, and the division of the calendar.¹⁷

Diodorus tells us that the common language was first articulated by Hermes and many nameless objects gained a name; he also states plainly that Hermes invented writing.¹⁸ Most scholars understand

¹⁵ Socrates' partner in the dialogue, Cratylus, believes in a namegiver who assigns philosophically sound names which reveal essences and this leads him to postulate a divine inventor of words (*Crat.* 438c)—see below, Sect. 5. Elsewhere in the dialogue (397c) Socrates himself allows the possibility that some words originated with a superhuman power; see Baxter 1992, 42–3.

¹⁶ See Gambarara 1989, 89–91 (with notes on 96) and the further references there.

¹⁷ See Plato, *Phaedrus* 274c–d; *Philebus* (18a ff.), where Theuth is said to invent writing and several other things, but not language; see further below, Sect. 2. Burton 1972, 77–9 brings some relevant Egyptian sources on Theuth's inventions. Cicero (*De Natura Deorum* 3. 56) points to Hermes' identification with Theuth and mentions his invention of laws and letters.

¹⁸ ἡνὶ γὰρ τούτων πρῶτον μὲν τὴν τε κοινὴν διάλεκτον διαβρωθῆναι καὶ πολλὰ τῶν ἀνώνυμων τυχεῖν προσηγορίας, τὴν τε εὗρεσιν τῶν γραμμάτων γενέσθαι Diod. 1. 16.

Diodorus' reference to a common language and the coining of names to mean that the god invented language as well, but this point is moot.¹⁹ Elsewhere in his work, Diodorus refers again to the tradition that Hermes invented words and speech, only to reject the claim.²⁰ Horace, too, describes eloquent Hermes, who brings language as a means of civilizing primitive humans.²¹

Some of the strongest bits of evidence for the ancient view of Hermes as an inventor of language are negative. Philodemus, apparently criticizing the Stoic Diogenes of Babylon, states that no pious person (οὐδείς εὐσεβής) believes that Hermes invented speech.²² The second-century CE Epicurean, Diogenes of Oenoanda, argues in his long philosophical inscription that the arts are not a gift from the gods, but the product of men's needs and experience over time. Diogenes denies Athena any part in the invention of houses and clothing, and dismisses the hypothesis that Hermes taught the first words to earliest men, calling this view patent nonsense (περιφανὴς γὰρ αὐτῇ γε ἄδολεσχία fr. 12 Smith). The fact that Diogenes finds it necessary to ridicule the idea in such strong language probably indicates that this characterization of Hermes as the inventor of language was still popular in his time.²³ (We shall see below, Sect. 5, that Diogenes then goes on to attack the hypothesis that there was a single human creator of language.) It is worth noting that in none of these texts—with the possible exception of Diodorus 1. 16—do we hear anything of the process of formulating or transmitting language: it is simply a gift from Hermes.

In one further source Hermes does not invent a single language, but divides languages among men. According to Hyginus (*Fabulae*

¹⁹ Cole (1967, 108–9, 185 with n. 26) argues forcefully that in this passage Hermes does not invent or articulate language *per se*. What he does do, according to Cole, is create a common *koinē* for the Egyptians, who already have many dialects, and expand their vocabulary by coining new words for objects which have no designation.

²⁰ Diod. 5. 75; compare too 1. 43. 6: the Egyptian priests say that Hermes was the inventor of the arts and technology. For more of Hermes' inventions and discoveries, see the sources cited by Thraede 1962, 1196 and 1220–1 and the discussion in Kleingünther 1933, 29–31.

²¹ *Mercuri, facunde nepos Atlantis qui feros cultus hominum recentem voce formasti* (*Odes* 1. 10. 1–3); compare too Ovid's reworking of Horace's stanza (*Fast.* 5. 663–8). In the *Satires* (1. 3. 99 ff.), Horace describes humans as developing language on their own; see below, Sect. 3.

²² Philodemus, *De Musica* iv, p. 105 Kemke = SVF iii, fr. 90, pp. 234–5 (Diogenes of Babylon).

²³ See too *Anthologia Latina* 2. 1528 (= *Carm. Epig.* 1528), where Hermes is termed the inventor of money and giver of speech *lucris repertor et sermonis dator*, and the further references cited by Nisbet and Hubbard 1970, 127–9.

143), men originally lived without towns and laws under the rule of Jupiter, speaking a single language (*una lingua loquentes*). Mercury then divided languages among the nations and discord arose. Perhaps we should understand here that Hermes first devises these various languages and then distributes them to men.²⁴

Euripides' Supplices

Hermes is not the only god credited with the invention of language. In Euripides' *Supplices*, an anonymous god is said to have given humans speech. In this tragedy, Theseus delivers a speech (201–13) in which he describes primitive man's ascent from beastlike beginnings to civilized life. Theseus' account is one of a series of passages telling of man's cultural development found in fifth- and fourth-century Greek literature. These accounts of human progress—in the *Prometheus Vincit*, Sophocles' *Antigone*, Gorgias' *Palamedes*, the Hippocratic tract *On Ancient Medicine*, Plato's *Protagoras*, etc.—are thought to reflect sophistic ideas in circulation at the time. In all these narratives, primeval man is said to have originally lived an animal-like existence, gradually improving his lot: there is no decline from a golden age. In some of these writings, humans are responsible for their own progress, while in others, as in the *Supplices*, it is a god who enables men to acquire the arts of civilization. In Euripides' play, Theseus credits an unidentified deity with establishing order for confused and brutish early humans:

αἰνῶ δ' ὅς ἡμῖν βίον ἐκ πεφυρμένον
καὶ θηριώδους θεῶν διεσταθῆσται

I praise the god who brought order to our life from a confused and beastlike state. (Eur. *Suppl.* 201–2)²⁵

The adjectives used here to describe the life of primitive man, *πεφυρμένος* and *θηριώδης*, confused and beastlike, are key words,

²⁴ Gatz 1967, 162 notes the likely influence of the biblical tale of the Tower of Babel here; see too Rose's comments ad loc. in his edition of the *Fabulae* and see too below, Sect. 2 on Phoroneus.

²⁵ In some anthropogonies—e.g. Archelaus DK 60 A4—early men are barely distinguished from animals; see further Blundell 1986, 79–80. O'Brien 1985 argues persuasively that the doctrine of man's moral and primeval brutishness can be traced no earlier than this very passage of the *Supplices* and that ideas about man's primitive beginnings first circulated in the third quarter of the 5th cent. There are, however, earlier, 6th cent. references to man's progress—most notably Xenophanes fr. 18—and the discoveries made by men in the history of civilization; see too the references collected by O'Brien 1967, 59–66; Kleingünther 1933, 26–9. For general discussions of these progress passages see the bibliography cited in n. 2 above.

recurring in other progress accounts. These words, along with another favourite adjective *ἄτακτος*, disorderly, may have been found in the very first description of the animal-like existence of early man produced by a Greek thinker, and then been used time and again, as catchphrases, in subsequent depictions of primeval men.²⁶ In our passage from the *Supplices*, a god is responsible for granting the arts of civilized life, including speech, to men, but the civilization he brings is nonetheless presented as a series of progressive developments. The arts granted by Theseus' god are described in an ascending order of sorts—intelligence, language, agriculture, houses, navigation, commerce, divination—and such an order is more commonly associated with narratives in which it is human beings who gradually develop civilization by themselves.²⁷

The very first act of Theseus' beneficent god is to grant human beings intelligence; next comes speech. In Euripides' words:

πρῶτον μὲν ἐνθεὶς σύνεσιν, εἶτα δ' ἄγγελον
γλῶσσαν λόγων δούς, ὥστε γινώσκειν ὅπα

First he implanted in us intelligence, then gave us speech, words' messenger, so that we might understand discourse. (203–4)

These brief lines encompass a great deal more than a declaration that language is a gift from a deity, the kind of statement we have already encountered in relation to Hermes. Here we find traces of an interest in the *process* of language development. The god's first gift to men is intelligence (*πρῶτον μὲν ἐνθεὶς σύνεσιν*); thought precedes language and is a prerequisite for speech.²⁸ Next, speech allows us to communicate our thoughts to others in words (*εἶτα δ' ἄγγελον γλῶσσαν λόγων δούς*). Intelligence then comes into play again, so that we understand what is spoken (*ὥστε γινώσκειν ὅπα*).²⁹ If Euripides' tragic hero tells us that speech originated with a god, his description

²⁶ For *πεφυρμένος* see Lämmli 1962, i. 63 ff. and the passages cited by Dierauer 1977, 29 n. 24. For *θηριώδης* see the references in O'Brien 1985, 265 n. 5 and Dierauer 1977, 28 n. 17. Davies 1989, 18–19 with n. 5 brings further uses of *ἄτακτος*.

²⁷ See Conacher 1980, 88–90 esp. n. 16.

²⁸ Commentators note a similar link between speech and intelligence—and its absence in beasts—in Euripides' *Tro.* (671–2): καίτοι τὸ θηριώδες ἀφθόγγον τ' ἄν φωνῇ τ' ἀχρηστον τῇ φύσει τε λείπεται (Yet an animal is voiceless by nature, lacking in intelligence and wanting in its nature).

²⁹ For this interpretation of *Suppl.* 203–4 see Collard's excellent analysis in his commentary ad loc. (1975, ii. 163). Collard rightly stresses that the two lines form a rounded unit. 'Intelligence is given that we may think, speech that we may communicate thought in words; the process in reverse allows comprehension of what is spoken.'

nonetheless includes a rudimentary attempt to analyse what lies behind language and to trace the relation between thought and speech. This brief analysis may well owe something to sophistic ideas on the subject.³⁰

Prometheus

In another fifth-century tragedy, the *Prometheus Vincit*, we again find a god credited with granting a series of inventions and capacities to humans. (It does not much matter for our purposes if Aeschylus is the author of the play, for even those who deny authenticity generally assign the tragedy a date in the 440s or 430s, a date even earlier than that of the *Supplices*.)³¹ In two linked speeches (443–71, 476–506), Prometheus describes the series of discoveries and *technai* which he has freely presented to man. There are significant parallels between Prometheus' account of the rise of civilization in the *PV* and that of Theseus in the *Suppliants*. Both passages begin with a description of primitive man's sorry state, both present their catalogues of gifts in an ascending order, moving from humans' elementary physical needs to more sophisticated activities, and both include some of the same arts—farming, architecture, navigation, and divination—among these gifts.³² The author of the *PV* describes primitive man's original, pre-civilized state in some detail. His hero Prometheus portrays early humans as dreamlike creatures who confuse everything at random (*ἐφύρον εἰκὴ πάντα PV 448–50*).

They are witless (*νηπίους ὄντας 443*) and without judgement (*ἄτερ γνώμης 456*),³³ and as with the deity of the *Supplices*, Prometheus' first gift to them is intelligence. The god gives them sense and makes them the master of their minds (*ἐννοῦς ἔθηκα καὶ φρενῶν ἐπηβόλους 444*). The second gift found in the *Supplices* is language, and while we are not actually told that Prometheus goes on to grant humans

³⁰ See Gatz 1967, 149.

³¹ For the problem of the date and authenticity of the *PV* see e.g. the useful survey in Conacher 1980, 141–74; see too the brief discussion with further bibliography in Griffith 1983, 31–5. The *Supplices* is usually dated to the 420s; see Collard 1975, i. 8–14.

³² See the useful detailed comparison of the two passages in Conacher 1980, 88–90.

³³ Clay (1989, 114–16) notes that in the *Hymn to Hermes* the young Hermes encounters a slow-witted old man (lines 92–3), who seems to represent a primitive phase of human existence, pre-agricultural and pre-political; the hymn's old man is reminiscent of the early, uncomprehending humans of the *PV*.

speech, this is implied by our text. The confused and witless early humans certainly seem to lack language before Prometheus takes them under his wing. They do not make proper use of their eyes or ears: they look in vain and hear without listening (*κλύοντες οὐκ ἤκουον 448*); this latter expression seems to imply that they do not comprehend speech.³⁴ If Prometheus does not explicitly state that he gave humans language, he does tell of his gift of two more advanced skills which are associated with—and certainly require—language, the arts of number and writing.

καὶ μὲν ἀριθμὸν, ἐξοχον σοφισμάτων,
ἐξηγῶρον αὐτοῖς, γραμμάτων τε συνθέσεις
μνήμην ἀπάντων, μουσομήτορ' ἐργάνην

And indeed I discovered for them number, outstanding among subtle devices and the combining of letters as a means of remembering all things, the Muses' mother, skilled in craft. (*PV 459–61*)

The god's gift of language is, it seems, 'disguised' in these subsidiary skills.³⁵ Prometheus is, of course, a *god*, a beneficent deity who grants mankind a variety of arts as gifts, and that is an important feature of the *PV* as a whole. At the same time the detailed catalogue of his beneficial inventions is presented in a way not wholly suitable to the god. For one thing, elsewhere in the play, Prometheus is first and foremost the bringer of fire. The fire he steals and conveys to men has a threefold role: it is an actual physical gift, the source of further technology, and a symbol for all the arts.³⁶ Yet Prometheus fails to mention fire—and technologies based on fire—in his speech on the gifts he grants mankind. (In fact, a great deal more is missing from this list of *technai*: the god ignores the social and political arts as well.) A second point worth noting is that Prometheus' catalogue of inventions is arranged on a graded, evolutionary scale, and consequently resembles progress accounts in which it is humans who gradually and successively discover the arts of civilization to meet their changing and increasingly sophisticated

³⁴ The expression in lines 447–8 *βλέποντες ἔβλεπον μῆτρον, κλύοντες οὐκ ἤκουον* is apparently proverbial—see Griffith's note ad loc. (1983, 165)—but the variation of the verb in line 448 *κλύοντες οὐκ ἤκουον* may nonetheless point to the fact that before Prometheus first brought men speech they neither listened to—nor comprehended—words. See Dierauer 1977, 32 n. 4 (and compare 40 n. 5).

³⁵ Thus Collard 1975, ii. 162 (ad *Suppl.* 203–4); see Havelock 1957, 57 and Gentinetta 1961, 79 n. 1. Kahn 1981, 103 suggests that language is not mentioned because it does not constitute a *techné*.

³⁶ See *PV* 110–11, 253–4, 612–13; O'Brien 1967, 60–4.

needs. When the god states at the end of his speech *πάσαι τέχαι βροτοῖσιν ἐκ Προμηθέως* (PV 506), we are meant to remember that his name means 'forethought' and appreciate the play on words: all the arts come to mankind not so much from Prometheus as from (human) forethought and intelligence. Indeed, from the late fifth century onwards, Prometheus often serves as a symbol of human intelligence, inventiveness, and ingenuity.³⁷ It is not unlikely, then, that the catalogue of Promethean gifts in this section of the PV is modelled upon descriptions of human discoveries and inventions made over the course of time.

2. CULTURE HEROES AND FIRST MEN: PALAMEDES, THEUTH, AND PHORONEUS

Here it is worth comparing Prometheus, the divine hero, with a human *πρῶτος εὐρετής*, Palamedes. Palamedes is described as an inventor from at least the sixth century BCE onwards: Stesichorus already knows him as an inventor of letters.³⁸ He is no less a culture hero than Prometheus in classical Greek literature, and the two resemble one another in their resourcefulness and inventiveness.³⁹ Both Palamedes and Prometheus are credited with some of the same discoveries and inventions, most notably numeracy and writing.⁴⁰ Scholiasts commenting on our speech from the PV state that Aeschylus assigns Prometheus' inventions to Palamedes as well. Palamedes may well have learned these things from Prometheus, the scholiasts add.⁴¹ Modern scholars tend to view the relationship between the two great inventors the other way around and argue that it is likely that the author of the *Prometheus Bound* made use of

³⁷ See Conacher 1980, 49–51; Griffith 1983, 166–7 (ad 450–506), 177–8 (ad 506); O'Brien 1967, 60–4.

³⁸ Σηλαίχορος . . . τὸν Παλαμήδην φησὶν εὐρηκέναι [sc. τὰ στοιχεῖα] (PMG 213).

³⁹ For the relation between the figures of the two culture heroes, Prometheus and Palamedes, see O'Brien 1967, 60–4; Thraede 1962, 1198–9. Kleingünther (1933, 28 and 82) contends that Palamedes first became known as an inventor in 7th cent. Argos and was originally known for his invention of weights and measures. Phillips 1957 suggests that the figure of Palamedes stands for Minoan arts which were inherited and developed by the Mycenaean Greeks.

⁴⁰ For Palamedes' inventions see e.g. Gorg. *Pal.* 30, Alcidas. *Ulix.* 22, and the further references cited by Wüst 1942, 2505–8.

⁴¹ See in particular Aeschylus, *Palamedes* fr. 182a III Radt (transmitted as a scholion on the invention of number at PV 459 καὶ μὴν ἀριθμὸν . . .): καὶ μὴν ταύτην τὴν εὑρεσιν Παλαμήδῃ προσήκει [sc. Aeschylus] ἴσως δὲ καὶ αὐτὸς τὸν Προμηθεὺς ἔμαθε ταῦτα.

a speech by Palamedes in which the human hero enumerated his discoveries and inventions.⁴²

A fragment from a *Palamedes* tragedy underlines the resemblances between Prometheus and Palamedes. The hero tells how he brought order to the Greeks by introducing them to the use of number.

ἔπειτα πάσης Ἑλλάδος καὶ συμμάχων
βίον διώκησ' ὄντα πρὶν πεφυρμένον
θηράσιν θ' ὅμοιον πρῶτα μὲν τὸν πάνσοφον
ἀριθμὸν ἡύρηκ' ἔξοχον σοφισμάτων

Then I ordered the lives of all of Greece and her allies, which had previously been confused and beastlike. First of all, I discovered all-wise number, outstanding among subtle devices. (Adesp. fr. 470 Nauck² = Aes. *Palamedes* fr. 181a Radt)⁴³

Palamedes' description of the art of number or arithmetic (*ἀριθμὸν . . . ἔξοχον σοφισμάτων*) is identical with that of Prometheus in the PV (459), and he uses the same key phrases to describe the chaotic and animal-like life of the Greeks and their allies *βίον . . . πεφυρμένον θηράσιν θ' ὅμοιον* which we have found in the accounts of pre-civilized man in both the PV and the *Supplices* (above, Sect. 1 with n. 26). Palamedes is assigned, in a variety of sources, the invention of arithmetic and writing, the arts which are closely linked to—and in the PV implicitly refer to—the invention of language. Was Palamedes seen as the inventor of language as well?

Apparently not. There is an inherent difficulty in supposing that a historical figure—or a legendary, mythological figure who is assigned a historical setting—invented language.⁴⁴ How could the *πρῶτος εὐρετής* of speech be a named figure who belongs to a recognizable world which is filled with other speaking figures, and still be said to have invented language? Plato's Socrates points to the difficulties posed by viewing Palamedes both as a historical figure and the inventor of a primary art. In the *Republic* (7. 522d), Socrates argues that while Palamedes supposedly invented number at Troy, thus facilitating the ordering of the army and the counting of ships, one can hardly imagine that before Palamedes came along,

⁴² Thus Sommerstein 2000, 121–2 with n. 8, who thinks that the PV was written decades after Aeschylus' *Palamedes*, the source of inspiration for Prometheus' speech; compare Kleingünther 1933, 83.

⁴³ For discussions of this adespota fragment and its attribution, see O'Brien 1985, 871–2 with n. 32; Sommerstein 2000, 121–2; Conacher 1980, 90 with nn. 17–18.

⁴⁴ See the remarks of Phillips 1957, 276–7.

Agamemnon had no idea how many feet he had!⁴⁵ If it is difficult to imagine an innumerate Agamemnon at Troy, a mute Agamemnon is an impossibility. The historical setting assigned Palamedes points to a major difference between the mortal culture hero and Prometheus. Prometheus is a deity, remote in time and space, while Palamedes belongs to the 'real' world and the 'historical' period of the Trojan War. If some of Palamedes' inventions overlap with those of Prometheus, the hero of the *PV* also grants to humans more basic or crucial arts, such as fire, the domestication of animals, and navigation. Perhaps because he is a 'historical' personage, and not a hero of long ago who is lost in the mists of time, Palamedes is generally credited with the invention of secondary arts or subsidiary skills, rather than more primary discoveries. He is said, for instance, to have invented fire beacons, rather than fire, or three meals a day, but not agriculture.⁴⁶ By the same token, we should allow Palamedes his discovery of arithmetic and writing but—unlike the case of Prometheus in the *PV*—exclude the possibility that he invented language.⁴⁷ In some sources, Palamedes is not credited with the invention of writing, but only with the addition of individual letters to the Greek alphabet, removing him even further from the invention of speech.⁴⁸

Another culture hero worth mentioning here is the Egyptian god Theuth, as described by Plato. We have already encountered Theuth in relation to Hermes. In Plato, Theuth also bears a strong resemblance to Palamedes and many of the discoveries assigned to Palamedes are attributed to Theuth in the *Phaedrus* (274c–d). Theuth, too, is said to have invented mathematical arts—that is,

⁴⁵ Adam in his commentary ad loc. (1907, ii. 108) interestingly notes that the knowledge of number is one of the characteristic differences between man and the lower animals—see Pl. *Tim.* 39b and [Pl.] *Epinomis* 978c. Speech, of course, is another such marker.

⁴⁶ See e.g. Gorg. *Pal.* 30; Soph. *Nauplius* fr. 432 Radt. In later sources, such as Philostratus' *Heroicus* (33. 1), Palamedes is depicted as a universal culture hero with powers closer to those of Prometheus, inventing the seasons and cycle of months, and naming the year—see Kurke 1999, 250; see too Blundell 1986, 11.

⁴⁷ Compare Kurke 1999, esp. 250–1 on Palamedes' list of inventions (in Gorgias *Pal.* 30) as representing 'a kind of second-order organizing principle', with e.g. the military tactics he invents used to organize fighting men, while weights, measures, and number regulate material property. Compare too the characterization of Theuth's inventions in Ferrari 1987, 280–1 n. 21 and see immediately below.

⁴⁸ See e.g. Theophrastus, *Peplos* fr. 735 (Fortenbaugh); Plut. *Quaest. Conv.* 738e–f; Hyginus, *Fab.* 277 and the further sources cited by Wüst 1942, 2506 and Jeffery 1967, 155–7 with n. 10.

arithmetic, geometry, astronomy—as well as games, draughts, dice, and, most important of all, writing.⁴⁹ In the *Phaedrus* Theuth is termed a god, a daimon (note *τὸν θεῶν . . . τῷ δαίμονι* 274c), but elsewhere in Plato his status is more fluid and Socrates is uncertain if he is a god or a divine man (*εἴτε τις θεὸς εἴτε καὶ θεῖος ἄνθρωπος* *Philebus* 18b). If in later Greek writers Theuth is associated with Hermes as an inventor of speech, in Plato he is credited only with writing and this may be related to his status as a minor deity, at best. Plato's Theuth, like Palamedes, is a lesser inventor and benefactor than Prometheus.

Both Palamedes and Theuth point to the distinction between first- and second-level—or essential and non-essential—arts and inventions and we find two interesting uses of this distinction elsewhere in Plato. In the 'city of pigs' outlined by Socrates in the beginning of the *Republic* (369a ff.), there are men to provide food, shelter, clothing, and the other essentials of life.⁵⁰ Builders, farmers, weavers, and shoemakers form the core of the first simple city: clearly theirs are the essential crafts. Carpenters, herdsmen, sailors, merchants, smiths, and other craftsmen are then added to the city as well. When Glaucon insists upon raising the standard of living, Socrates includes yet another echelon of non-essential craftsmen such as sculptors, painters, musicians, poets, actors, children's servants, barbers, cooks, confectioners, doctors, etc. These additional arts transform the city into an inflated and luxurious place. We find another description of the bare minimum of civilization in the opening of book 3 of the *Laws* (676a ff.).⁵¹ The Athenian Stranger of the *Laws* does not attempt to go back to the earliest existing state to trace the very beginnings of civilization and civic life. He sees civilizations as repeatedly flourishing and then failing, in cyclic fashion, and consequently investigates a hypothetical primitive state, established by survivors of a catastrophic flood. The survivors are shepherds with no memory of citycraft or the use of metal and tools. They are lonely and glad of each other's company, and lead a simple life, living on milk and meat. The god is said to have ensured that technologies such as fire, pottery, and weaving survived from before

⁴⁹ Pl. *Phaedr.* 274c–d. See Ferrari 1987, 280–1 n. 21 and Nightingale 1995, 148–54 on Palamedes and Theuth.

⁵⁰ Ukkull-Gyllenband 1924, 20 suggests that Plato's 'city of pigs' was influenced by Protagoras.

⁵¹ See Cole 1967, 97–106 for a detailed analysis of this passage.

the cataclysm to allow men to develop, and it seems clear that speech is preserved as well (678c-679b).⁵² Humans have clothing, bedding, housing, and other necessary utensils, but lack many of the more advanced civilized skills, such as the art of writing (680a). Such men seem to need a Palamedes or a Theuth, rather than a Prometheus. The Athenian Stranger, incidentally, presents this age of innocence and simplicity as an idyllic time. The survivors will subsequently form a community, wall their cities, and codify laws, thus leading to a full-fledged civilization, complex and contentious.

One further group worth noting in this context of culture heroes are first men. The Greeks have no overall generic ancestor of humanity, no Adam, and we find instead a series of first men who serve as the mythical ancestors of inhabitants of different areas of Greece. These first men are transitional figures, men who are of divine, autochthonous, or miraculous origin themselves, but who then proceed to beget historical descendants, thus serving as fathers of their different tribes. Phoroneus, the mythical ancestor of the Argives, was one such first man, and he is an antediluvian, that is, he lived before the flood of Deucalion. Phoroneus is the son of the river Inachus and the ash tree Melia and is termed in the *Phoronis*, an anonymous epic dated to the seventh or sixth century BCE, the father of mortal men.⁵³ We learn from a much later source, Pausanias, that the Argives believed that Phoroneus—rather than Prometheus—was the source of fire for men. Pausanias also states that Phoroneus introduced scattered men to communal life, founding the first city. Elsewhere he is termed the first king and is said to have initiated the worship of Hera.⁵⁴ While Phoroneus is assigned an important role in civilizing humans—giving them fire, initiating religious worship, gathering men into an organized community, and serving as a king—he nonetheless is not said to have invented language. Such an invention seems beyond the ken of even first men. Indeed there is a certain tension between the role of first man and that of culture hero, as we can see from Pausanias' discussion of Pelasgus, a first man of Arcadia. Pelasgus, said to be born from the earth, is also a first king.

⁵² Compare the myth of the *Politicus* (268e ff.; see above, Sect. 2.1) where men begin fully grown and fully intelligent, with the world revolving under divine guidance. After a while, the god releases the world, and men gradually lose all memory of divine order. Do they lose language as well?

⁵³ *πατέρα θνητῶν ἀνθρώπων Phoronis* fr. 1. See too *πρώτων ἀνθρώπων γενέσθαι Acaulius FGtH 2 F 23a* and see Plato, *Tim.* 22a.

⁵⁴ Paus. 2. 19. 5; 2. 15. 5; Hyginus, *Fab.* 143.

He invented huts for shelter and introduced the use of sheepskin coats and the eating of acorns. Pausanias, while telling of these accomplishments, suggests that others must have been born at the same time, for Pelasgus could hardly have been a king without subjects.⁵⁵ There are other first men who introduce various features of civilization—Deucalion for instance is said to have founded cities, built temples, and been a first king after the flood—but none of these named heroes is assigned the invention of speech.⁵⁶

Not all Greeks saw themselves as descendants of first men and some, most notably the Athenians, described their origins in another way. They viewed themselves as autochthonous, created or arising from the earth. Perhaps such first, earthborn men come to light equipped with language, but Greek is nowhere presented as an autochthonous tongue.⁵⁷

3. THE GREAT MYTH OF THE PROTAGORAS

Let us return to Prometheus. Prometheus of the *PV* bestows upon humans a whole series of arts, with the power of speech apparently following upon his very first bequest, that of intelligence. In the famous myth of the beginnings and evolution of human society, attributed to Protagoras by Plato (*Prot.* 320c8-323e4), Prometheus is again a beneficent culture hero who grants men unique gifts, but the god plays a smaller role in actually shaping humans.⁵⁸ In Protagoras' myth, men start out in life naked, unshod, without coverings, and unarmed, and Prometheus steals for them technical wisdom together with fire (*τὴν ἐντεχνον σοφίαν σὺν πυρὶ Prot.* 321d1-2). This gift of practical sagacity—the use of fire and its technologies—seems to be the equivalent of the intelligence bestowed upon humans by the anonymous god in Euripides' *Suppliants* and the faculty of reason given by Prometheus in the *PV* as a first gift.⁵⁹ In the two tragedies, the gods continue to grant men further arts and abilities, including speech, but Protagoras' Prometheus simply

⁵⁵ Paus. 8. 1. 4-5.

⁵⁶ Apoll. Rhod. 3. 1086-9. For some further first men and culture heroes see Sihes 1914, 27-9 (with notes on 105); Guthrie 1957, 21-8 with notes on 112-18; O'Brien 1985, 274 with n. 44.

⁵⁷ See Loraux 2000, esp. 47-8.

⁵⁸ It is impossible to determine the extent to which the sophist Protagoras' own ideas and writings underlie the myth narrated by the Platonic character 'Protagoras'. See e.g. Morgan 2000, 136 with n. 4; Havelock 1957, 407-9 surveys earlier scholarly debate.

⁵⁹ See Guthrie 1957, 88-9; 1969, iii. 65.

gives men these basic technical skills: humans then develop the further arts and crafts by themselves. In Protagoras' myth, then, Prometheus does not bestow speech upon early men but sets human beings on the path that will allow them to devise language by themselves. Interestingly, religion is said to be the very first thing humans turn to after being granted fire and practical wisdom, even before they develop language.

Ἐπειδὴ δὲ ὁ ἄνθρωπος θείας μετέσχε μοίρας, πρῶτον μὲν διὰ τὴν τοῦ θεοῦ συγγένειαν ζῶντων μόνον θεοῦς ἐνόμισεν, καὶ ἐπεχειρεῖ βωμῶν τε ἰδρύεσθαι καὶ ἀγάλματα θεῶν.

Since man shared in the divine, first of all, because he was akin to the gods, he worshipped them uniquely among living creatures, and began to establish altars and statues. (*Prot.* 322a)

The priority assigned to religion in this outline of the development of human civilization is curious. For one thing, we would not expect Protagoras—an acknowledged agnostic, if not an atheist—to place such emphasis on homage to the gods. It is also difficult to understand how religious worship and the construction of altars and statues could have come before language and before the feeling of piety (*αἰδώς*) which men will acquire only later, when Zeus bestows the political virtues (*Prot.* 322c). Commentators generally explain away this depiction of religious worship as man's earliest activity. They point out that such devotion to the gods is simply a part of the mythological trappings of Protagoras' tale, and the priority of religion has been interpreted as 'a handsome compliment to the divine "givers" of all the arts'.⁶⁰ Whatever the intent of our passage in the *Protagoras*, it is worth digressing and taking a brief look at both these suggestions—that is, that religion preceded speech and that men built without using language for communication—as they appear in much later Western writings.

Religion and Protolanguage

The assumption that religious feelings precede language certainly features in later European thought. Indeed, sentiments related to the divine were sometimes seen as the very impetus of language. Vico speaks of a 'divine . . . language expressed by wordless religious acts or divine ceremonies', a language preceding articulate speech.

⁶⁰ Vlastos 1956, ix-x n. 11; see Guthrie 1957, 88-9 with 141-2 nn. 10-11; Kerferd 1981, 168. Renehan 1981, 251-2 collects passages in later authors, from Aristotle onwards, which stress that man, alone of all the animals, shares in the divine.

Speech itself was inspired by fear of the heavens, according to Vico.⁶¹ Others, too, contend that recognition of the numinous, or awe of the heavenly bodies lay at the very foundation of language. According to Max Müller, language began with a first sign—a graphic sign, rather than a gesture or a sound—meant to refer to men's very first object of worship, the sun. The intuition of the divine, implanted in humans by God at their very creation, was given different names by different peoples in Müller's view. (It is not surprising that Müller, a scholar of Sanskrit—the ancient Indo-European language used in a great body of religious texts—sought to link language and religion in this way).⁶²

Another theory is that language was invented by men of religion. The Soviet linguist Nikolai Marr (1864-1934) suggested that the words of all languages could be traced back to four original elements. Each of these four elements was connected with a certain tribal totem, invented by shamans or magicians for secret, professional purposes, according to Marr. (Stalin himself would argue against Marr's theories in 1950.)⁶³ In our own time, Eric Gans, utilizing the work of René Girard, argues that language first arose in a sacral context. Speech developed from the cries which accompanied the collective ritual sacrifice of a marginal member of society, according to Gans. He suggests that early language possessed an exclusively religious or ritual function. The original vocabulary was rare and sacred and consisted of a set of variations on the name of god.⁶⁴ (Gans conceivably would argue that the early humans of Protagoras' myth begin speaking by devising names for the deities they worshipped.) Another theory is that language developed from mantras or ritual chants which accompanied the performance of rites: speech originated when meanings were attached to mantras, by chance.⁶⁵ Other modern scholars speak more generally of rituals as preceding and leading to the development of language. Terence Deacon, in a recent comprehensive analysis of the co-evolution of the human brain and language, suggests that ritual may underlie language. He sees the development of symbolic thinking—and consequently language—as growing out of ritual practices.⁶⁶

⁶¹ Vico, *New Science*, 929; 377; 447; see above, Sect. 2.2.

⁶² See Gans 1999b, and Olender 1992, ch. 5.

⁶³ See Beaken 1906, 3-4, 106-7; Robins 1990, 229-30.

⁶⁴ See Gans 1981, esp. 10-13, and 1999a.

⁶⁵ See Staal 1994, 3580-2 and compare Burkert 1996, ch. 1, esp. 18-20.

⁶⁶ Deacon 1997; see too Knight 1998.

Archaeological findings are also used to link religious worship and language, but in reverse fashion: the ritual-related material remains of early humans, such as deliberate burials, symbolic grave goods, and cave paintings, are sometimes thought to demonstrate their possession of language. Such artefacts, it is argued, point to human cognitive and communicative capabilities, with people clearly thinking about (and discussing) the concepts of self, life, and death.⁶⁷ The rich material culture of Upper Palaeolithic people, who lived some 35,000 years ago, is particularly interesting. It is thought that Upper Palaeolithic people chanted or sang ritually in front of their cave paintings of animals.⁶⁸ Such Palaeolithic paintings are perhaps analogous to the statues of Protagoras' myth: we can picture, if we like, Protagoras' first men chanting to their sculptures of the gods, with their chants then leading into speech.

In the ancient world, Protagoras is unusual in having religious rituals precede speech. Other Greek thinkers who sketch the development of civilization normally describe religious practices as arising after the acquisition of language. Both in the *PV* (484–99) and in the *Supplices* (211–13), a beneficent god grants the skills of divination and interpretation of omens and sacrifices to humans only after he gives them language. In other accounts, such as that of the Stoic Manilius (*Astronomica* 1. 66–98), early humans develop language by themselves and only subsequently turn to worship of the gods and the interpretation of divine signs. Epicurus and his followers, Lucretius and Diogenes of Oenoanda, also included both a description of the beginnings of language and an analysis of religion and the fear of gods in their surveys of the origins of civilization. Book 12 of Epicurus' lost work *On Nature* (*περί φύσεως*) dealt with mankind's cultural development and apparently told of the origin of language before discussing how men first came to believe in and worship the gods: religion, in Epicurus' account, arises only after men possess speech and this is true of his followers as well.⁶⁹ We shall see below that according to Epicurus, Lucretius, and Diogenes of Oenoanda, speech is due to the natural and creative powers of humans. Indeed,

⁶⁷ See e.g. Lieberman 1998, 80–1 and 139 and see the further references below, nn. 79 and 151.

⁶⁸ See Lucretius, *DRN* 5. 1028 ff., 1161 ff. and Diogenes Oen. fr. 12, 16–20 Smith; both of which apparently derive from Epicurus, *Nat.*, book 12. See Obbink 1996, 306 and the further evidence he cites there for the content of Epicurus' lost work. See too Long and Sedley 1987, ii. 145–6 and compare Epicurus, *Ep. Hdt.* 75–7 for a similar sequence of a discussion of religion following upon an analysis of the origin of language.

⁶⁹ Leakey 1994, 109–12.

it is up to humans to nurture the natural development of language in these accounts, for the tranquil and self-sufficient Epicurean gods, who have no real role in the world, do not influence the development of civilization.⁷⁰

In general, once language is removed from the realm of the gods, the source of speech, a universal aspect of human civilization, must be explained. When European thinkers of the seventeenth century became dissatisfied with the belief that language was of divine ancestry and was granted to humans by God, they turned elsewhere in order to account for the origin of speech. Language became secularized, as it were, and assigned to humans: speech dropped from its high status as God's creation and became a property of ordinary creatures, even lowly and uneducated ones, in the seventeenth century.⁷¹ Richard Simon, one of the earliest scholars of modern biblical criticism, cites Epicurus, Lucretius, and Diodorus of Sicily on the beginnings of language, when he attempts to refute the idea of a God-given language in his *Histoire critique du Vieux Testament* of 1678. These classical writers provided Simon with a basis for a natural explanation of the origin of language. Simon, incidentally, also used the writings of the Church Father Gregory of Nyssa when outlining his theory, for Gregory argued that God did not create a language for primeval humans, but gave them the capacity to do so themselves.⁷² Simon hoped to avoid being accused of heresy, but nonetheless scandalized his contemporaries. Slightly earlier, Simon's contemporary, Bernard Lamy managed to eat his cake and have it too. Lamy in his *Rhetoric* of 1675 credited humans with the creation of language, basing his arguments in part on Diodorus of Sicily, but then disavowed this 'fable' and presented the 'true' biblical account.⁷³ The question of the divine origin of language continued to trouble eighteenth-century figures. Johann Peter Süssmilch presented to the Berlin Academy in 1756 his argument in favour of language coming from God. In a paper subsequently published under the title 'An attempt to prove that the first language originated not from Man but from the Creator alone',⁷⁴ Süssmilch

⁷⁰ For the Epicurean gods see above, Sect. 2.2 with n. 75.

⁷¹ See de Grazia 1980.

⁷² Gregory of Nyssa, *Contra Eunomium* 2. 253–4 (p. 287 Jaeger).

⁷³ See Ricken 1994, 134–5; Eco 1995, 86.

⁷⁴ 'Versuch eines Beweises daß die erste Sprache ihren Ursprung nicht vom Menschen, sondern allein vom Schöpfer erhalten habe'; the work was published in 1766.

argued that language is orderly and beautiful, and consequently could not have been formulated by chance, but needed a reasonable being to design it. Since man could not have reasoned without language, God must be the source of language.⁷⁵ Süssmilch—perhaps the last of strong voices in favour of a divine origin of language—was responding to an earlier lecture that same year by Pierre Moreau de Maupertuis which took the human invention of language for granted. Man, Maupertuis argued, discovered and perfected a useful tool.⁷⁶ Samuel Formey, the Permanent Secretary of the Berlin Academy, was then careful to formulate the subject of the 1759 prize essay in open terms: Could man left to his own devices, invent language? And how could he do so?⁷⁷ Johann Gottfried Herder would win the prize with an attack on Süssmilch's views: he argued in favour of humans developing language by means of reflection, because of their cognitive faculty.⁷⁸ We have seen (above, Sect. 3.3) that one way to circumvent the fraught issue of the divine origin of speech was to outline a purportedly fictitious scenario of how language could have developed by those isolated from human society. Another option was to assume that after the flood, or after early humans were dispersed in punishment for building the Tower of Babel, people became bestial and speech was lost.

While thinkers who deny the existence of gods and see religion as a product of human minds often find it necessary to explain the human invention of language, our myth shows that attributing language to a human source need not entail godlessness. Protagoras, who sees language as coming after—and possibly in the wake of—religion, nonetheless allows that men developed speech on their own. The intelligence which makes human speech possible is of divine origin in Protagoras' myth, but language itself comes from human creativity and ingenuity.

⁷⁵ Rousseau was similarly concerned with the relation between language and thought, since, in his view, early humans needed words in order to refer to concepts, and concepts in order to form words. Süssmilch apparently formulated this *aporia* independently of Rousseau; see Stam 1976, 102; Ricken 1994, 145–6.

⁷⁶ See Stam 1976, 97–103 for a good summary of the arguments of Maupertuis and Süssmilch.

⁷⁷ The essay question of 1769 was formulated in French: *En supposant les hommes abandonnés à leur facultés naturelles, sont-ils en état d'inventer le langage? Et par quels moyens parviendront-ils d'eux-mêmes à cette invention?*

⁷⁸ See Stam 1976, 111–27 for a useful discussion of Herder's views.

Building and Language

What of the suggestion in the *Protagoras* myth that building preceded language? Modern thinkers often assume that early humans used tools and controlled fire—that is, possessed Protagoras' gift of *τὴν ἐντέχον σοφίαν ἀνὴρ πύρι*—well before they turned to speech. *Homo habilis*, the tool user, and *homo erectus*, who used fire, precede the loquacious *homo sapiens*.⁷⁹ Language and building are often linked by ancient writers when describing the progress of civilization (below, Sect. 5) and the Greeks used metaphors from construction to describe the elements of speech, the 'building blocks' of language, just as we do. Dionysus of Halicarnassus, for instance, has an analogy between a builder putting a house together of stone, timber, and brick, and the good arranger of words, carefully combining nouns, verbs, and other parts of speech. Lucretius extends this analogy to the fashioning of the world: he compares the composition of physical objects by means of different arrangements of atoms to the composition of words through different arrangements of letters.⁸⁰

The most striking Western tale linking building and language use is, of course, the biblical story of the Tower of Babel. Protagoras' picture of pre-linguistic men constructing altars and statues of the gods is, in effect, a reversal of the story of Babel. In the Bible, men incur divine wrath by building a tower meant to rival the heavens and are then punished by a confusion of languages; here, mute men build objects, perhaps jointly, in order to celebrate the gods, and their ability to speak comes only later. Irish grammarians of the seventh century CE will contend that the very materials of the Tower of Babel—the clay, water, bitumen, etc.—represent the various parts of speech: the structure of language and the construction of the tower are analogous.⁸¹ In a twentieth-century variation on the Babel myth, Wittgenstein outlines a simple builders' language. Wittgenstein imagines a primitive, four-word language, with a vocabulary

⁷⁹ On *homo habilis* and *homo erectus* see Bickerton 1990, ch. 6. For the vexed question of the date of the beginnings of language and the likelihood that *homo erectus* already possessed language, see e.g. Beaken 1996, 123–4; Leakey 1994, xiv, 125–9, 154–6; see too below, n. 151.

⁸⁰ Dion. Hal. *De Comp. Verb.* 6; Lucretius, *DRN* 1. 815–29; 912–20, etc. See Friedländer 1941 and compare the discussion in the *Cratylus* (424b–425b) on forming words from primary elements (above, Sect. 2.1). Aristophanes has a playful description of the tragedian Agathon bending verbal timbers into shape and lashing and gluing songs together (*Thesm.* 52–4).

⁸¹ See Eco 1995, 16–17.

consisting of four elements taken from the world of construction: 'block', 'pillar', 'slab', and 'beam'. The builder calls out these words and an assistant brings him the corresponding items.⁸² We can, if we wish, imagine Protagoras' early humans beginning to speak by developing precisely such a builder's language, inventing (together) names for the parts of the altars and statues they construct (together).⁸³ Another very concrete language worth noting in this context is described by Jonathan Swift in *Gulliver's Travels* (pt. 3, ch. 5). Swift tells of men who express themselves not by means of words but of things, 'since words are only names for things'. These learned men of Lagado carry on conversations by displaying the things they carry about with them in a sack. Swift may in fact have been influenced by Aristotle, who, in the *Sophistici Elenchi* (165⁶ ff.), says that since we cannot carry with us the things we wish to talk about, we use words instead of things, as tokens (*σύμβολα*).⁸⁴ Perhaps Protagoras' early men conversed in stone, metal, or wood—the materials of their altars and statues—before learning to use words.

Articulated Speech: Xenophon, Diodorus, and Archelaus

It is time to look at the second stage of human cultural progress in Protagoras' account, language. Plato's Protagoras has a brief but tantalizing description of men inventing speech, after building altars and statues for the gods.

ἐπειτα φωνὴν καὶ ὀνόματα ταχὺ διηρθρώσατο τῇ τέχνῃ

Next man quickly articulated speech and names through his skill. (Pl. *Prot.* 322a)

Here, unlike the texts we have seen so far, it is human beings who develop language, using the skills they already possess (τῇ τέχνῃ): Prometheus' role in the growth of civilization is limited to the initial provision of fire and technical wisdom. We do not hear of a single

⁸² Wittgenstein 1953, 3, §2; see Harris 1980, 41–3 and 53–4 for an analysis of Wittgenstein's elementary language.

⁸³ It is interesting to note a passage in the Platonic *Alcibiades* (111a–c) where Socrates, when demonstrating that Greek speakers all agree on the meaning of words, uses 'stone' and 'wood' as examples of quintessential words. (For sticks and stones as 'paradigms of the contemptibly commonplace', see the passages collected by Denyer (2001, 123) in his note ad *Alc.* 111b11–c1.) See too the first words supposedly taught by Diogenes of Oenoanda's hypothetical schoolteacher (fr. 12 Smith; below, Sect. 5).

⁸⁴ See Whitaker 1996, 11 with n. 5.

human inventor of speech and men apparently develop language together in a joint effort. No coherent theory of the development of language is provided here and the process is summarized in a difficult, succinct phrase: man articulated speech (*φωνὴν . . . διηρθρώσατο*) and (invented) names (*καὶ ὀνόματα*). We can understand, perhaps, that Protagoras' brief description encompasses two different facets of the invention of language. The early humans of the myth, it seems, articulated speech, that is, produced sounds deliberately in order to signify something. They also coined names, that is, settled upon individual words to be used to designate specific objects.⁸⁵ Speech, we learn from this passage, is created through sound and meaning: words must be both articulated and assigned a referent. If articulated sound points to a unique human physiological capability, naming underlines a unique human mental capacity.

This passage from the *Protagoras* may be the earliest extant reference to the phonetic articulation of speech.⁸⁶ Subsequent Greek writers will return to man's unique control over his tongue and distinguish articulate speech from the confused, inchoate sounds made by animals or primeval, pre-linguistic man.⁸⁷ Xenophon discusses articulate speech in a chapter of the *Memorabilia* (1. 4) devoted to man's unique abilities in relation to other animals, abilities which he owes to the gods. Xenophon mentions man's erect stature, his ability to use his hands, and his flexible tongue; articulate speech is one more divine gift.

καὶ μὴν γλώτταν γε πάντων τῶν ζώων ἐχόντων, μόνῃν τὴν τῶν ἀνθρώπων ἐποίησαν οἷαν ἄλλοτε ἀλλαχῇ ψάουσιν τοῦ στόματος ἀρθροῦν τε τὴν φωνὴν καὶ σημαίνειν πάντα ἀλλήλοις ἃ ἐβουλόμεθα.

While all animals have tongues, the gods have made the human tongue alone capable, by touching different parts of the mouth at different times, of producing articulate sounds and signalling to one another whatever we like. (Xen. *Mem.* 1. 4. 12)

⁸⁵ See the discussion of Ax 1984, 96–102, 114–15, who recognizes that the word *ὀνόματα* in our passage implicitly refers not only to the physical articulation of speech but to semantics—i.e. assigning a meaning to words—as well.

⁸⁶ See Ax 1984, 98. Interestingly, the absence of reference to *articulated* speech in Eur. *Suppl.* 203–4—see above, Sect. 1—has led Scaliger and other scholars to emend line 204b to *ὡς γεγνώσκειν ὅτι* (or *ὅσα*) i.e. a god gave humans speech 'that we may speak out clearly', in place of the transmitted text *ὡς τε γινώσκω ὅσα* 'so that we might understand discourse'. See Collard 1975, ii. 163 (ad 203–4), who rejects the conjecture.

⁸⁷ See Ax 1984, 96–118; Dierauer 1977, 31–4; Lämmli 1962, i. 81–4; ii. 150–2

Diodorus, in an important passage to be discussed below (Sect. 5), describes the voices of early men as meaningless and confused before they begin to articulate words (see τῆς φωνῆς δ' ἀσήμου καὶ συγκεχυμένης οὔσης . . . διαθροῦν τὰς λέξεις Diod. 1. 8. 3). Both Xenophon and Diodorus mention the peculiar human capacity for signs (σημαίνειν Xenophon; φωνῆς δ' ἀσήμου Diodorus), referring here to the differentiation of sounds needed to produce articulate speech, rather than the use of words as signs.⁸⁸ At the same time, both Xenophon and Diodorus are well aware that speech is more than articulated noises: these distinct sounds need to be used to denominate objects, that is, they need to be formed into words which refer to things. Diodorus will go on to depict early men coining words,⁸⁹ while Xenophon, in a later section of the same chapter of the *Memorabilia* (1. 4. 14) will stress that man is unique in his mental abilities, not just his physical capacities. Just as a creature with the body of an ox and the mind of a man cannot do what he likes, states Xenophon, so too a man with hands—or, we might add, an articulate tongue—but no intelligence lacks any advantage.⁹⁰ Words—a combination of sound and significance—require both the unique physical qualities and the unique mental capabilities which Xenophon attributes to humans.

It is possible that a discussion of the origin of speech and man's peculiar ability to manoeuvre his tongue in order to produce articulate speech was found already in the writings of Archelaus. Archelaus, the fifth-century pupil of Anaxagoras (and teacher of Socrates), wrote on the beginnings of living creatures. He thought—in accordance with earlier Ionian tradition—that men,

(notes). Lämmler brings further ancient references to the role played by the tongue, palate, and teeth in producing speech. Dierauer 1977, 12 with n. 28 notes that the early Greeks of pre-sophistic times scarcely distinguished between animals' characteristic sounds and human speech, seeing the animals' various noises as their individual languages, parallel to that of unintelligible foreigners.

⁸⁸ Thus Lämmler 1962, i. 81–4, and ii. 150–1 esp. nn. 583 and 585, who compares, among other ancient parallels, the discussion in the Hippocratic *περὶ σαρκῶν* 18 (xiii. 200 Joly), where the unknown author argues that without a tongue to articulate we would not be able to speak clearly and would produce only one sound (ἡ δὲ γλῶσσα . . . ποιεῖ σαφηνίζειν. ἦν δὲ μὴ ἡ γλῶσσα ἄρρωστοί . . . οὐκ ἂν σαφῶς διαλέγοιτο, ἀλλ' ἡ ἕκαστα φῶσει τὰ μόνωφωνα). Lämmler (i. 81–4, 136–41) also points to the analogy between creating orderly speech out of confused sounds and the more general fashioning of order out of chaos which is commonly found in Greek cosmogonies.

⁸⁹ καὶ πρὸς ἀλλήλους τιθέσθαι σύμβολα Diod. 1. 8. 3—see below, Sect. 5.

⁹⁰ For other early discussion of the relative wisdom of animals and men, see Lovejoy and Boas 1935, 389–91; Dierauer 1977, chs. A and B, esp. 31–5.

like other animals, originally derived from earth and had the same diet of slime, but living creatures were subsequently born from one another. Men were then separated from animals and established leaders, cities, laws, and arts, that is, civilization. Animals, like men, have the capacity to think (*νοῦς*), according to Archelaus, but some use it more slowly than others.⁹¹ Archelaus not only discussed the origins of man and the evolution of civilization: supposedly he was the first one to state that sound (or voice) is due to the concussion of air.⁹² This analysis of the physical production of speech may have been part of a discussion of the beginnings of language, found in a survey of the development of civilization. Archelaus may also have discussed the relation between words and the objects they denominate, for he is said to have contrasted *nomos* and *physis*, convention and nature, when speaking of justice (see further below, nn. 108 and 115).⁹³ While modern scholars have very different assessments of Archelaus' significance and originality, it seems safe to say that Archelaus discussed the invention of speech by men.⁹⁴

The Nature of Protagoras' First Language

What was man's original language like in the myth of the *Protagoras*? When Protagoras' early humans invent speech, they already possess a capacity for rational thought. This ability to reason may, in fact, be innate, for humans are distinguished from animals even before Prometheus steals fire for them. Unlike the early men of Euripides' *Suppliants* and the Aeschylean *Prometheus Vinctus*, the primeval men of Protagoras' myth are not called beast-like or confused. From the very start they are differentiated from other living beings, who are termed τὰ ἄλογα (Pl. *Prot.* 321c1), mute or irrational creatures.⁹⁵ Since men are equally speechless at this point in Protagoras' tale, we can either take τὰ ἄλογα as pointing ahead to the future differentiation between speaking men and

⁹¹ DK 60 A4. 5–6; compare A1. 17.

⁹² πρῶτος δὲ εἶπε φωνῆς γένεσιν τὴν τοῦ ἀέρος πλῆξιν (DK 60 A1. 17). In fact, Archelaus was not the first—see DK 59 A106, where Anaxagoras, Archelaus' teacher, is said to have described sound as a product of collision of air.

⁹³ DK 60 A2: Ἀρχέλαος . . . ἐδόξαζε τὸ δίκαιον καὶ αἰσχρὸν οὐ φέρεσθαι εἶναι, ἀλλὰ τίμειον; see 60 A1. 16 for a very similar statement.

⁹⁴ See Lämmler 1962, i. 82–4 (with notes in ii. 151–2); Ax 1984, 96–8; Kahn 1981, 102–3; O'Brien 1985, 276 with n. 53.

⁹⁵ See *Prot.* 321c4: τὰ . . . ἄλλα ζῶα and compare 324b1 where the phrase ἀνοῦτον ὁρίων ἀλογίστως 'like a beast, irrationally' is used. See O'Brien 1985, 273 and Morgan 2000, 140–1 with n. 15.

speechless animals, or else we can understand that while other creatures are indeed irrational and unthinking, humans are already capable of reasoning, even if they lack the ability to communicate by speech. Men are certainly rational creatures once Prometheus steals technical skill and fire for them, and they immediately demonstrate this rational capacity by turning to acts of religious worship (321d–322a). Their second action as rational creatures is to invent language. The further inventions the men of our myth devise immediately after creating language are clearly intended to remedy their earlier, unequipped state. We are told that they invent houses, clothing, shoes, coverings and utilize nourishment from the earth, because they originally were naked, with no shoes, coverings, or weapons.⁹⁸ Similarly, perhaps, men—rational, but wordless—felt their lack of language from the very start. Speech, it seems, is the most important equipment of them all. Presumably these early humans coined names together, and did so because they found speech to be helpful in some way, but Protagoras does not tell us so. He does tell us that men joined together out of fear of beasts (*Prot.* 322b) and speech, of course, would make their banding together against animals all the more effective. But it is possible that early humans' immediate purpose in using words was simply to express their emotions to those around them, and their strongest feelings could have been fear of wild animals, gratitude to the gods, or perhaps joy at finding allies in their struggle for survival. Here (compare above, Sect. 3.2) we are unable to assign a hypothetical first word to Protagoras' original tongue in order to characterize the salient features of this protolanguage. This early language could relate either to humans' emotions or to their needs.

Nor do we know anything of the nature of the first names in this language. Did Protagoras' rational early humans use natural, inherently correct names which reflected the essence of the objects they designated or were these original words linked only by convention to the objects they signified? Here we should leave the Protagoras of Plato's dialogue and turn to the actual, historical sophist and the evidence for his views. Protagoras is said to have engaged in two, possibly distinct, linguistic activities, discussing both *ὁρθόπεια* and *ὁρθότης ὀνομάτων*, correct diction and the correct-

⁹⁸ Note in particular the direct contrast between *καὶ ἐσθῆτας καὶ ὑποδήσεις* καὶ *στρωμνὰς* . . . *ἤρετο* (322a) and *τὸν δὲ ἀνθρώπον γυμνὸν τε καὶ ἀνυπόδητον καὶ ἄστροφον* (321c).

ness of names.⁹⁹ We know that Protagoras distinguished the three genders of nouns (DK 80 A27) and criticized Homer for not using gender correctly: the poet makes the word *μῆνις* 'wrath' feminine, rather than the more appropriate masculine, Protagoras complains (DK 80 A28). Protagoras, then, engaged in an analysis of the proper use of words in a literary context, attempting to make language grammatically neater or more effective rhetorically.¹⁰⁰ Did he deal with the correctness of names more generally, arguing that words should reflect meanings and fit the objects they designate? Here it is important to remember Protagoras' relativist approach to reality: if man is the measure of all things so that reality varies from person to person and even varies for the same individual from time to time, there can be no single naturally correct way of describing reality. If the actual Protagoras did not believe in unchanging essences, it would be inconsistent for him to posit naturally correct names which reflect unchanging essences.¹⁰¹ The men of our myth should, then, have invented names which were conventional and arbitrary, rather than natural, if they behaved in accordance with the sophist's own ideas. And yet an earlier thinker than Protagoras, Heraclitus, was able to reconcile his theory that all things consist of opposites and are in a perpetual state of flux with the idea that names do reveal something about the objects they denominate. Names, in Heraclitus' world, can teach us about at least half of opposing, dual concepts.¹⁰² Since everything essentially consists of opposites, names are always insufficient as a medium to convey essences, but they do contain relevant information about one half of the concept. Perhaps Protagoras, in similar fashion, could reconcile his relativistic outlook with names which were nonetheless natural. Unfortunately, Plato's text gives us no hint as to how the process of assigning names actually worked.

⁹⁹ *ὁρθόπεια*: DK 80 A26 (=Pl. *Phaedrus* 267c); *ὁρθότης ὀνομάτων*: DK 80 A27 (=Pl. *Cratylus* 391c).

¹⁰⁰ It is possible that Protagoras thought *μῆνις* should not be feminine because wrath is a masculine trait, but perhaps his argument was based on morphology, and the form of the word is what seems masculine; compare Arist. *Clouds* 658 ff. See too Gentiletta 1961, 24–34, who contends that Protagoras conceived of an original language with a natural fit between words and things.

¹⁰¹ See Classen 1959, 35 and compare Bett 1989, esp. 153–61; compare Pl. *Crat.* 385d–386a. See too Fehling 1965, 212–17; Baxter 1992, 147–51; Guthrie 1969, iii. 204–9; Kerferd 1981, 68–9. Vlastos 1946, 53–4 with n. 19 (= 1993, 353–4) notes that there is no ancient evidence for Protagoras upholding the conventional theory of naming.

¹⁰² See esp. DK 22 B48, B32 and see Sluiter 1997, 169–70; Sikes 1914, 63.

Later in the *Protagoras*, there is an engaging description of the means by which a young child is taught virtue: the community at large, together with a whole series of teachers educate the youngster (*Prot.* 325c–326c). Plato's Protagoras stresses the analogy between learning virtue and learning language from one's surroundings (*Prot.* 327e–328a).¹⁰¹ It is likely that once language was invented, a child was taught the meaning of words by her family and teachers in much the same way that she was later taught to understand the more abstract concepts of virtue. Protagoras explains that children are taught moral excellence by example and demonstration, with parents and tutors stating 'this is just, that is unjust; this is noble, that is base; this is holy, that is unholy'.¹⁰² We can extrapolate backwards from this picture of parents, servants, and teachers teaching a child right and wrong to their teaching an infant language, again by means of demonstration, with the adults indicating which word designates which object as well as the right and wrong use of words.¹⁰³ Even if this is Protagoras' understanding of the way young children learn to speak Greek, we cannot draw an analogy between this method of language acquisition and the process, undertaken by early men, of inventing speech for the first time. In primeval times, there was, of course, no general society already well acquainted with language, a society whose members could teach primitive humans to speak.

Language and Law-Abiding Societies

Indeed, the early loquacious humans of Protagoras' myth are unable to form a society. In this tale, the possession of speech and the ability to build houses are not enough to guarantee a society, let alone stable life in organized communities. Men, we are told, join together and found cities only after they feel threatened by animals, but they are then unable to stay together without the political arts.

¹⁰¹ Compare Euripides' *Suppliants* (913–15), where Adrastus points out to Theseus that courage can be taught to men, just as a child can be taught to speak and hear matters it does not yet understand . . . ἡ δ' εὐανδρία διδακτός ἐστιν καὶ βρέφος διδάσκειται λέγειν ἀκούειν θ' ὡν μάθηται οὐκ ἔχει. Note the ἀκούειν: as in the earlier *Suppl.* passage (above, Sect. 1), language is a two-way channel for speaking and listening.

¹⁰² τὸ μὲν δίκαιον, τὸ δὲ ἄδίκον, καὶ τὸδε μὲν καλόν, τὸδε δὲ αἰσχρόν, καὶ τὸδε μὲν ὄντιον, τὸδε δὲ ἀνόντιον *Pl. Prot.* 325d.

¹⁰³ Compare the description of a child's acquisition of language in the *Dissoi Logoi* (6. 11–12): we learn to speak from our parents—some of us more and some of us less, some from fathers and some from mothers. See too Diogenes of Oenoanda's ironic description of the way the alleged first teacher of language goes about teaching words to the multitudes (*fr.* 12 Smith; below, Sect. 5).

Neither a common tongue nor a common enemy suffice to keep men together in Protagoras' myth and they need Zeus' extra gifts of a sense of decency and justice (αἰδῶ τε καὶ δίκην) in order to remain together in ordered cities (*Prot.* 322b–c). It is interesting—and puzzling—that divine intervention is needed to get societies going, while men were able to create speech by themselves. Language seems to have been the creation of a group of early men: presumably they worked together and assigned the meanings of words as a joint venture, agreeing on the names to be given to objects in what amounted to a contractual agreement. Such a compact is crucial if, as seems most likely, the words of their original language were conventional, rather than natural. Yet these house-building men—who could, it seems, join together to produce a language—did not form a social unit or city at first. They were scattered and did not live together in communities (ἄνθρωποι ᾤκουν σποράδην, πόλεις δὲ οὐκ ἦσαν *Prot.* 322b).¹⁰⁴ When Protagoras' early humans then tried to form cities they were unsuccessful, because of their lack of morality and laws. While the primeval men of this myth were able to agree upon words and their meanings and create a common tongue, they could not work out laws and rules of behaviour in parallel fashion, in order to form a common political system.

The parallel between the role of justice (or law) in society and that of language is nonetheless worth pursuing. Morality—the common concepts of right and wrong—can be viewed as a kind of second language, a system of conventions established by men collectively for utilitarian purposes, in order to make life more manageable (see above, Sect. 1.3).¹⁰⁵ Codes of behaviour and speech are generally limited to a given group of people and serve to organize and characterize a specific society. The validity of the rules of both normative behaviour and language is real, but limited. These rules can seem

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Later in the *Protagoras*, there is an engaging description of the means by which a young child is taught virtue: the community at large, together with a whole series of teachers educate the youngster (*Prot.* 325c–326c). Plato's Protagoras stresses the analogy between learning virtue and learning language from one's surroundings (*Prot.* 327e–328a).¹⁰¹ It is likely that once language was invented, a child was taught the meaning of words by her family and teachers in much the same way that she was later taught to understand the more abstract concepts of virtue. Protagoras explains that children are taught moral excellence by example and demonstration, with parents and tutors stating 'this is just, that is unjust; this is noble, that is base; this is holy, that is unholy'.¹⁰² We can extrapolate backwards from this picture of parents, servants, and teachers teaching a child right and wrong to their teaching an infant language, again by means of demonstration, with the adults indicating which word designates which object as well as the right and wrong use of words.¹⁰³ Even if this is Protagoras' understanding of the way young children learn to speak Greek, we cannot draw an analogy between this method of language acquisition and the process, undertaken by early men, of inventing speech for the first time. In primeval times, there was, of course, no general society already well acquainted with language, a society whose members could teach primitive humans to speak.

Language and Law-Abiding Societies

Indeed, the early loquacious humans of Protagoras' myth are unable to form a society. In this tale, the possession of speech and the ability to build houses are not enough to guarantee a society, let alone stable life in organized communities. Men, we are told, join together and found cities only after they feel threatened by animals, but they are then unable to stay together without the political arts.

¹⁰¹ Compare Euripides' *Suppliants* (913–15), where Adrastus points out to Theseus that courage can be taught to men, just as a child can be taught to speak and hear matters it does not yet understand . . . ἡ δ' εὐανδρία διδασκός εἶπερ καὶ βρέφος διδάσκειται λέγειν ἀκούειν θ' ὡν μάθηται οὐκ ἔχει. Note the ἀκούειν: as in the earlier *Suppl.* passage (above, Sect. 1), language is a two-way channel for speaking and listening.

¹⁰² τὸ μὲν δίκαιον, τὸ δὲ ἄδικον, καὶ τὸδε μὲν καλόν, τὸδε δὲ αἰσχρόν, καὶ τὸδε μὲν δοῖον, τὸδε δὲ ἀνόσιον *Pl. Prot.* 325d.

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quite arbitrary: other societies have different languages and different notions of right and wrong. Here we come to the complex issue of φύσις versus νόμος, nature versus convention, an issue which often arises in accounts of the origins of human society.¹⁰⁶ Are laws—or for that matter, words—natural and somehow divinely sanctioned? Do they possess an absolute validity or are they simply conventional, a human construct? How did the rules of justice originate—through a god, a gifted mortal, or a group of humans working together? We will return to some of these complex issues immediately below.

In Protagoras' eyes, language differentiates men from animals and raises them above other creatures, but speech is nonetheless not a force powerful or cohesive enough to guarantee civilized life. Laws are necessary as well, and these can be developed only through the help of the gods. Perhaps we can explain this difference between the origin of language and the origin of moral codes by looking at an exchange found in another Platonic dialogue, the *Alcibiades*. Alcibiades, like Protagoras in our dialogue, points to the parallel between learning language and learning justice. He states that from earliest childhood he has learned of justice and injustice from the many, just as he has learned to speak Greek from the community as a whole. Socrates suggests to Alcibiades that the many can be good teachers of Greek, but not of justice, because while all agree on the meaning and use of words, justice is a much more controversial area. Indeed the many can disagree on issues of morality and immorality to the extent of killing one another (*Alc.* 1. 110d–112d). Words, it appears, are easier to formulate and agree upon than rules of behaviour.

Isocrates, writing a decade or so after the *Protagoras* was composed, believes very strongly in the power of language, for he argues that speech and the art of persuasion are, in fact, tools potent enough to guarantee an orderly society. We find in his *Nicocles* (5–6) an eloquent description of the all-pervasive power of language. (Isocrates, a teacher of rhetoric, is not disinterested in his praise of persuasive speech.) In most of our abilities we are no better than, and even inferior to, animals, according to Isocrates, but our faculty of speech makes us unique.

¹⁰⁶ See Guthrie 1969, vol. iii, ch. iv, esp. 60–84; Kahn 1981, esp. 102; Bett 1989, 162.

ἐγγενομένον δ' ἡμῖν τοῦ πείθειν ἀλλήλους καὶ δηλοῦν πρὸς ἡμᾶς αὐτοὺς περὶ ὧν ἂν βουλευθῶμεν, οὐ μόνον τοῦ θηριωδῶς ζῆν ἀπὸ ἀλλήλων, ἀλλὰ καὶ συνελθόντες πόλεις ψίκισαμεν καὶ νόμους ἐθέμεθα καὶ τέχνας εὖρομεν, καὶ σχεδὸν ἅπαντα τὰ δι' ἡμῶν μεμνηχανθέντα λόγος ἡμῖν ἐστίν ὁ συγκατασκευάσας.

Our ability to persuade one another and make clear whatever we wish not only allowed us to escape from the life of wild beasts, but coming together, we founded communities, fixed laws, and discovered arts. Speech is what established for us virtually all the things we have devised. (*Nicocles* 6)¹⁰⁷

One particular virtue of language mentioned here by Isocrates, our ability to make clear to ourselves whatever we like, reminds us of Xenophon's description of articulate speech as allowing us to signal to one another whatever we like, although Isocrates refers to the content of speech, while Xenophon refers to its sounds.¹⁰⁸ Another passage of Xenophon's *Memorabilia* (4. 3. 11–12) is even closer to Isocrates' words here. The gods implanted in us a rational element (*λογισμὸν*) Socrates states, and gave us speech by means of which we participate in all good things, teach one another, share in things, legislate laws, and rule ourselves politically.¹⁰⁹ Xenophon, like Isocrates, sees speech as preceding—and underlying—communities, laws, and political life.

Isocrates, incidentally, is not particularly interested in the question of the origin of speech and the other arts. In one composition, he attributes many of the arts of civilization to a single person, the Egyptian Busiris, and in another he credits the city of Athens with such innovations.¹¹⁰ Several centuries later Cicero praises the powers of speech and persuasion in a fashion similar to that of Isocrates. In the *De Inventione* (1. 2) we learn that early bestial men lived by brute force with no religion, laws, marriage, etc. until a great and

¹⁰⁷ This paragraph is reproduced in *Antidosis* 254. Slightly later in the *Nicocles*, this praise of speech *per se* will shade into a discussion of rhetoric, the art of speaking properly (τὸ . . . λέγειν ὡς δεῖ *Nic.* 7), i.e. Isocrates' real agenda. At *Paneg.* 48 when praising philosophy, Isocrates uses similar language (τοῦτο μόνον ἐξ ἁπάντων τῶν ἱσίων θῶν ἐφύμεν ἔχοντες) without really distinguishing between (1) the simple fact of speech, (2) eloquence, and (3) philosophy.

¹⁰⁸ Compare δηλοῦν πρὸς ἡμᾶς αὐτοὺς περὶ ὧν ἂν βουλευθῶμεν (*Isoc. Nicocles* 6) with καὶ σημαίνει πάντα ἀλλήλοις ἃ ἐβουλόμεθα (*Xen. Mem.* 1. 4. 12). Uxkull-Gyllenband 1924, 10–11 with n. 21 points to the parallel between Isocrates' words ἀλλὰ καὶ συνελθόντες πόλεις ψίκισαμεν καὶ νόμους ἐθέμεθα καὶ τέχνας εὖρομεν (*Nicocles* 6) and Archelaus' description of man's unique accomplishments καὶ νόμους καὶ τέχνας καὶ πόλεις καὶ τὰ ἄλλα συνέστησαν (*DK* 60 A4. 6; see above, text near nn. 91–4).

¹⁰⁹ τὸ δὲ καὶ ἐμνηστὶν δοῦναι, δι' ἧς πάντων τῶν ἀγαθῶν μεταδιδόντες τοὺς ἀλλήλους διδάσκοντες καὶ κοινωνοῦμεν καὶ νόμους τιθέμεθα καὶ πολιτεύομεθα (*Mem.* 4. 3. 12).

¹¹⁰ *Busiris*, *passim*; *Paneg.* 28–50; see Edelstein 1967, 85 and Guthrie 1969, iii. 80 n. 2 and 83–4.

wise man persuaded them otherwise. He assembled scattered men and introduced them to useful and honourable occupations. In Cicero's *De Oratore* (1. 8. 33–1. 9. 37) we hear more generally of eloquence which gathered scattered humanity into one place and led it from a brutish existence to establish social communities and laws. So states Crassus, one of the dialogue's speakers; Scaevola will argue that it was not the snares of eloquent orators which led to the establishment of cities, but the reasoning of wise and brave men.¹¹¹ Indeed, in Cicero's *De Republica* (3. 2. 3), we find reason (*mens*) accredited with developing human speech (see below, Sect. 5). Cicero, like Isocrates, is not especially concerned with the precise inventor of language or the beginnings of speech: it is the use to which speech can be put which interests him.

This link between language, laws, and cities continues in later ancient writings. Horace in his *Satires* (1. 3. 99–105) has a vivid description of early beastlike and inarticulate men (*mutum et turpe pecus*) fighting one another with claw and fist for acorns and dens. Once these men invented words with which to articulate their cries and feelings, Horace tells us, they began to avoid war, build towns, and legislate laws. Speech leads to a more peaceful, law-abiding way of life.

Other classical thinkers doubt that society is so easily formed and ordered. In a fragment of a fifth-century BCE satyr play, we find that not even laws—let alone the power of speech—are enough to guarantee civilized behaviour. The play is the *Sisyphus*, once generally attributed to Critias, now often assigned to Euripides.¹¹² In a striking speech, Sisyphus describes a time when men lived without order, like beasts (*ἄτακτος . . . βίος καὶ θηριώδης* 1–2)¹¹³ with neither reward for the good nor punishment for the bad. Humans then instituted punitive laws which prevented men from transgressing openly, but men continued to go unpunished for secret misdoings. An ingenious and clever-minded man then invented religion and fear of the gods as a deterrent. He persuaded men that all-seeing

¹¹¹ Compare Philo, *Leg. Alleg.* 2. 15 for a similar brief mention of wise men inventing language: σοφούς τοὺς πρώτους τοῖς πράγμασι τὰ νόματα θέντας; see too Pl. *Crat.* 401b and 411b, and below, Sect. 5.

¹¹² 'Critias' *TGrFi.* 43 F 19 (Snell) = DK 88 B25. Davies 1989 has a text, translation, and useful commentary which deals with many of the questions raised by the fragment, including its authorship. See too Kahn 1997.

¹¹³ For these two favourite keywords in accounts of early man, see above, Sect. 1. Compare too the *Palamedes* adesp. fr. 470 Nauck (discussed above, Sect. 2) where men are termed *θηριώδης* but clearly possess language.

gods existed in heaven who could observe even covert acts and punish all wrongdoers. Sisyphus' cynical speech sees conventional morality as resting upon a deception perpetrated by a single shrewd man, who simply fabricates the race of gods. This individual takes over the role of Zeus in Protagoras' myth, bringing *aídos* and *dike* to men by means of his imagined gods. It is worth noting that religion is said to be the product of a sole inventor, while punitive laws were established by a group of men.¹¹⁴ If Sisyphus were to go back and describe the origin of language in his account of the development of civilization, clearly he would assign the beginnings of speech to humans, but would the inventor be a clever individual or a group of men? And would the motivation behind the invention of language be to introduce order and civility or to deceive (or perhaps to do both)? In a sense, men are moral, according to Sisyphus, because of words: the shrewd inventor of the gods uses persuasion and deception to introduce his very delightful and effective teaching (see *διδασμάτων ἡδίστον εἰσηγήσατο* 25), hiding the truth with a lying tale.

Sophocles and Babel

We hear briefly of the human invention of speech in an earlier drama of the fifth century, Sophocles' *Antigone*. The outlook of the chorus in the famous ode *πολλὰ τὰ δεινὰ* (332 ff.) is less cynical than that of Sisyphus, but no less complex. In this choral song, it is humans, and humans alone, who are responsible for the arts of civilization. Wondrous man knows how to navigate and to plough the earth with animals he has domesticated. He also knows how to snare, hunt, or tame creatures of the land, sea, and sky (332–53). The chorus continue:

καὶ φθέγμα καὶ ἀνεμόεν φρόνημα καὶ ἀστυνόμους ὄργας ἐδίδεξαν

And he taught himself speech and wind-like thought and the temper that regulates cities. (354–6)

Next the chorus describe how man learned to build shelters against the arrows of frost and rain (357–9).

The ode makes it plain that Sophocles shared with his contemporaries an interest in the origin and development of civilization.¹¹⁵

¹¹⁴ See lines 5–6. Davies 1989, 20–1 notes that the humans who invent laws are not commended for their creation: it is only the ingenious inventor of religion who is portrayed as a praiseworthy *πρώτος εὐεργής*.

¹¹⁵ See e.g. Soph. *Palamedes* fr. 438 Nauck (=479 Radt); *Nauplius* fr. 399 Nauck (=432 Radt) and the further references cited by Nestle 1910, esp. 134–7. Segal 1981

At the same time, his account is clearly not intended to be an orderly, step-by-step narration of man's ascent to civilization and the art of speech is mentioned here relatively late, only after the discovery of navigation, agriculture, etc.¹¹⁶ In this very brief account, man is said to teach himself (ἐδδάξατο) language. There is no hint of divine assistance of any kind, and no indication of the means by which he did so, either as an individual or group venture.¹¹⁷ Speech and thought as swift—or immaterial—as wind (φθέγμα καὶ ἀνεμῶεν φρόνημα) are linked here, as in the later play *Supplikes* (above, Sect. 1) and perhaps Sophocles is hinting at the inextricable bond between reason and language. The third element mentioned in this single phrase is ἀστυνόμους ὀργάς, a civic temperament or an inclination towards social order. Language, here, is not just the partner and voice of thought. Speech is also a social, civilizing tool leading to the formation of regulated communities, and the construction of houses, the next of man's activities described in our ode. In the few words that Sophocles devotes to the beginnings of language, we find then, a link between language, thought, and society: speech is both a cognitive tool and a social instrument. Greater stress, perhaps, is placed on the social use of speech, for language leads into the mention of laws, communities, and houses, that is the polis. We have already looked at Aristotle's discussion of the causal connection between speech and the establishment of cities and laws (*Pol.* 1. 2. 12 = 1253^a9–18; above, Sect. 2.2); Sophocles is more elliptical. Yet, as one scholar puts it, 'Aristotle's . . . analysis of the intimate bonds between human discourse and the moral fabric of a political society in *Politics* 1. 2. 12 reads like a gloss on Sophocles.'¹¹⁸

Sophocles' ode presents the ambiguous nature of human ingenuity and accomplishments, for the chorus go on a few verses later

discusses Sophocles' exploration of civilization in his plays; see in particular 4, 52–9, 93–8, 133–7, 161–6, 241–5, 333–40, 392–9 on the role and status of language. Uxkull-Gyllenband 1924, 10–11 argues for the likely influence of Archelaus (above, text near nn. 91–4 and n. 108) and Anaxagoras (fr. 4, 21b) on Sophocles' ode. See too Kahn 1981, 96–7, 104–5.

¹¹⁶ See Griffith 1999, 181 (ad *Ant.* 332–75) and 188 (ad *Ant.* 353–64).

¹¹⁷ In their commentaries ad loc., both Jebb (1891, 73–4) and Griffith (1999, 188) note the rare reflexive use of the medium ἐδδάξατο here. Jebb understands the verb to mean that man developed speech 'for his own benefit, by his own effort' and rewrites this as αὐτὸς αὐτὸν ἐδδάξε, i.e. 'he taught himself by himself', rather than understanding that men taught each other—compare Griffith—but this seems a misuse of the collective singular noun 'man'. See Schrijvers 1974, 358–9 with n. 60.

¹¹⁸ Steiner 1984, 254.

(*Ant.* 365–71) to note that resourceful man can turn to good or to evil. Observing the laws of the land and the gods' justice can lead to a lofty city (ὕψιπολις) but dwelling with evil will undo a city (ἄπολις). Technology and the mastery of nature are at best two-edged instruments, according to Sophocles, and they can lead to overweening and terrible acts—to δεινά in the more negative sense.¹¹⁹ These lines remind us of the message of the Tower of Babel: men—in their pride—can lose their buildings and cities. The builders at Babel are, of course, punished with the loss of their common tongue as well, and one of the lessons of that tale is that men need to communicate freely if they are to build together. Dante has a compelling version of the biblical story in his *De Vulgari Eloquentia* (1. 7. 4–7), in which he places particular emphasis on the link between building and language. In Dante's account, the builders of Babel are allotted new languages according to their various trades. Each group of craftsmen and workers speak a different language, after they are punished and the more highly skilled their trade, the ruder and more barbaric their new tongue, according to Dante. Nimrod, king of Babylon, is said to be the chief instigator and master builder of Babel and in the *Inferno* (31. 67–81) we find that Nimrod is left without language altogether, speaking a tongue no one can understand.¹²⁰ Dante's wicked builder has gone not only from a tall tower to being cityless—compare Sophocles' ὑψιπολις ἄπολις—but from speaking a language comprehended by all to uttering seeming gibberish. Interestingly, Nimrod is also associated with fire: he is said to have taught men to worship fire, threatening those who refused to do so with death by fire.¹²¹

4. FIRE AND LANGUAGE

In the ancient world, we find a strong link between language, building, and fire in the writings of the first-century BCE architect and engineer, Vitruvius. In his treatise *De Architectura*, Vitruvius describes the development of early men, and he includes the discovery of fire, invention of speech, and beginnings of building as part of

¹¹⁹ See Griffith 1999, 179–80 (ad *Ant.* 332–75).

¹²⁰ See Genesis 10: 9–10. The depiction of Nimrod as master architect of Babel is found in both Jewish and Christian sources—see Babylonian Talmud *Avoda Zara* 53b etc.; Augustine, *De Civitate Dei* (16. 3–5).

¹²¹ Again this story is found in both Jewish and Christian sources: Genesis *Rabbah* 38: 13; Clement, *Recognitions* 1. 30.

his progress account. Indeed, according to Vitruvius, men learn to speak as a direct result of their ability to control fire. Primitive humans originally encounter fire when it is created by branches of trees rubbing against one another. Men, terrified at first, flee, but they learn to appreciate the benefits of heat and to feed the accidental fire with logs. These early men then summon others, indicating by gestures the benefits of the blaze. They subsequently develop a language together, moving from gestures to sounds, words, and full-fledged speech in a series of steps. At this point, early humans—upright, dexterous, socialized people who are gathered in one place—turn to the construction of houses (*De Architectura* 2. 1-3, 6-7). Before investigating Vitruvius' outline of the stages of speech, it is worth looking more closely at the connection between the mastery of language and the control of fire.

First, a very brief look at the part played by fire in Greek thought, a role far more extensive than that allotted to speech. Fire has an important function in cosmogonies, zoogonies, and anthropogonies. Anaximander sees the sun, moon, and stars as being formed from a sphere of flame. Empedocles speaks of a fiery core to the earth and has human beings drawn out of the earth by fire. In the *Protagoras* myth, humans and other living creatures are created out of a mixture of fire and earth, and things compounded of these two elements, that is, water, and air. These examples could be multiplied.¹²²

Fire also plays a crucial role in the development of civilization, as we can see from the figure of Prometheus the firebringer. In the *PV* Prometheus proclaims that fire is the teacher of all arts to humankind and a great resource.¹²³ Prometheus of the *Protagoras* myth steals technical wisdom together with fire from Hephaestus, because men could not have acquired or used technical arts without fire.¹²⁴ In the cycles of lost and renewed civilizations outlined in Plato's *Laws* (above, Sect. 2), the ability to use fire survives the recurring cataclysms, so that men can redevelop the arts necessary

¹²² Anaximander: DK 12 A10. Empedocles: DK 31 B52 and B62. Protagoras myth: Pl. *Prot.* 320d. See too e.g. the further passages discussed by Blundell 1986, 31-2, 39, 42-3, 56-7, 68-9.

¹²³ διδάσκαλος τέχνης πάσης βοροῖς πέφνην καὶ μέγας πόρος (*PV* 110-11; see too lines 7, 253-4).

¹²⁴ Pl. *Prot.* 321d. Compare Pliny, *NH* 36. 200, who, when discussing various crafts and industries, concludes that there is almost nothing that is not brought to a finished state by means of fire (*nihil paene non igni perfici*).

for living (678e-679b). Xenophon, in his *Memorabilia* (4. 3), includes a two-pronged outline of the development of civilization. We have already seen (above, Sect. 3) Xenophon's claim that thought and language underlie the political and social arts; he assigns a parallel role to fire as the source of the technological arts. Fire, Socrates says (*Mem.* 4. 3. 7), is a partner in every art and every convenience which people fashion for themselves; none of the important necessities of life is independent of fire.¹²⁵ Both of these original capacities—fire and language—have been granted to men by the gods, according to Xenophon, but men then use these gifts as a basis to develop themselves further. Both in the *Protagoras* myth and in the *PV* fire is not only a necessary prerequisite for the technical arts; it also serves as a symbol of man's participation in the divine.¹²⁶

Fire, then, can represent the divine or, at times, the rational element found in humans. In Heraclitus' view, fire is both an archetypal form of matter and a force which directs the structure and behaviour of things. Individuals are most alive when hot and 'the dry soul is wisest and best'. (Heraclitus' views will be taken up and developed by the Stoics, who describe god as a designing fire, *πῦρ τεχνικόν*.)¹²⁷ According to Democritus, mind and fire are of the same nature and the atoms of soul most closely resemble those of fire.¹²⁸ Aristotle's pupil Theophrastus again points to the many facets of fire. In a short scientific essay *On Fire* (*περὶ πυρός*) Theophrastus begins with the statement that 'of the simple substances fire has the most special powers' and goes on to describe the physical properties of fire.¹²⁹ In another work, devoted to inventions and discoveries, Theophrastus states that wise Prometheus was the first to give men a share in philosophy and that is why the story was told that Prometheus invented fire.¹³⁰ Promethean fire is removed here from

¹²⁵ τὸ πῦρ . . . συνεργὸν δὲ πρὸς πᾶσαν τέχνην καὶ πάντα ὅσα ὠφελείας ἔνεκα ἀνθρώποι κατασκευάζονται . . . οὐδὲν ἀξιόλογον ἀνεῖ πυρὸς ἀνθρώποι τῶν πρὸς τὸν βίον χρησίμων κατασκευάζονται (*Mem.* 4. 3. 7).

¹²⁶ See Conacher 1980, 91; O'Brien 1967, 61-3 n. 17.

¹²⁷ Heraclitus: DK 22 B118; B30, B90, B64, B66, etc. Stoics on fire: Long and Sedley 1987, 46 A-P (i. 274-9; ii. 271-7).

¹²⁸ Democritus: DK 68 A101; see too e.g. Guthrie 1957, 51, 59-60 and 132 n. 23. Democritus is said to have written a work *Causes of Fire and of the Things in Fire* (*αἰτίαι περὶ πυρός καὶ τῶν ἐν πυρὶ* DK 68 B1 re), but the work may be spurious. See Cole 1967, 57 with n. 32.

¹²⁹ τὸ πῦρ φύσις ἰδιαίτατος ἔχει δυνάμεις τῶν ἁπλῶν *De Igne* 1. 1.

¹³⁰ Fr. 729 Fortenbaugh; the treatise devoted to inventions and discoveries was entitled *περὶ εὐρημάτων* (On Inventions) or perhaps *πρώτος* (Robe)—see fr. 58a, 728-36 Fortenbaugh. One fragment of this work tells of the invention of letters (fr.

its physical, technological use and becomes the blaze of philosophy, thought incarnate.¹³¹ This wider perception of the nature of fire points to two possible interpretations of the view, held by some ancient thinkers, that fire preceded language. We can understand that the physical control of fire by human beings came before and led to their use of speech, as, for example, in Vitruvius' account, but the claim may also imply, at times, that it is fiery thought or intelligence which preceded language.

Cooking and Culture

An important use of fire is for cooking and sometimes we find that cooking and a mild diet, rather than fire itself, are said to be the chief ingredient underlying civilization. Here we return to the view, found in earlier chapters, of diet as an important marker which distinguishes humans from animals. According to some Greek writers, people become truly human or civilized by learning to control fire and cook their food. Moschion, a tragedian of uncertain date, describes primeval men as cannibals, in a brief account of the development of civilization.¹³² Early men, according to the fragment of a lost play by Moschion (fr. 6), live in caves or ravines and know nothing of agriculture. They kill one another and subsist on human flesh. Presumably these brutish men do know how to speak, for they have laws, but law is weak and violence shares Zeus' throne (lines 15-16). It is only gradually, over time, that Moschion's humans acquire the arts of civilization. They discover cultivated grains and vines, agriculture, building etc. and become civilized. They also turn to a more regular—presumably cooked—diet and begin to bury the dead to prevent any further cannibalism. Moschion, incidentally, is indifferent as to how these changes come about over time, raising all three of the most common explanations furnished by ancient thinkers to explain the development of civilization. Human acquisition of the arts, Moschion states, may be due either to the

735) and another of the invention of the art of words (τέχνην λόγων) by the Syracusan Corax (fr. 736a-c).

¹³¹ Compare Posidonius' claim that philosophy—and specific philosophers—discovered the arts and techniques of daily life (Seneca, *Ep.* 90. 7, 11-13, 20-6, 31-2 = fr. 284 Edelstein-Kidd).

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inventiveness of Prometheus, or to necessity, or to the teaching of nature (lines 20-2).

In a fragment of the comic writer Athenio, we find a tongue-in-cheek passage on cooking as the origin of civilization. Here, too, there are primitive, beastlike men who indulge in allelophagy. A clever man begins to roast the meat of sacrificial cattle, according to Athenio, and cooking then develops in earnest, leading to a series of delicacies. Pleased men subsequently begin to live together, forming communities and cities.¹³³ Athenio, a Greek forerunner of Claude Lévi-Strauss, presents us with a playful exegesis of the raw and the cooked. In Diodorus Siculus' euhemeristic account of early Egyptian history (1. 13-16), it is Osiris, the third king, who brings about the end of cannibalism. Osiris, together with his sister Isis, introduces cultivated cereals.¹³⁴ Hermes is said to have introduced his innovations in language, writing, sacrificial practices, and music during their rule (above, Sect. 1). Fire, on the other hand, was invented by the very first king, Hephaestus, according to Diodorus here.

In the Hippocratic treatise *On Ancient Medicine*, cooked food is not described as the impetus to the rest of the civilized arts, but diet is an important factor in furthering progress and distinguishing early humans from animals. *On Ancient Medicine*, a work generally dated to the end of the fifth century BCE, includes a description (ch. 3) of primitive man starting out with the same foodstuffs as animals and slowly developing a more suitable diet over a long period of time. Human beings experimented with their crude and beastlike food, winnowing, grinding, sifting, kneading, mixing, boiling, and baking, and thus they gradually learned to prepare a diet suited to their constitution. These trial-and-error innovations in diet, undertaken out of necessity (ἀνάγκη) and need (χρεία), form the basis of medicine according to the Hippocratic composition.¹³⁵ Once again it is worth noting the parallels between diet and speech: both language and cooked food lift men above animals and help them overcome their physical inadequacies in relation to other creatures:

¹³³ Athenio fr. 1 K.-A. (= Athen. 14. 660e ff.). Athenio's date is uncertain, with scholars suggesting the 4th, 3rd, or 1st cent. BCE; see K.-A. 1983, iv. 13.

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necessity is the motivating factor in their development. On *Ancient Medicine* includes a detailed description of the experimental procedures which lead to the gradual development of human diet, but no similar fifth-century document on the process and various stages of language invention survives. We shall see below that all such extant descriptions were written several centuries later.

The Source of Fire

We do find relatively early accounts of the process of fire-making. In the *Homeric Hymn to Hermes* (108–15), a hymn assigned a date between the sixth and fourth centuries BCE, the infant Hermes invents a fire drill made of laurel and pomegranate wood. He is said to be the first to transmit this technique (*Ἑρμῆς τοι πρότιστα πυρρῆα πῦρ τ' ἀνέδωκε* 111). Hermes does not, of course, invent fire and a whole series of gods are associated with this powerful force. Hesiod is an early source for Zeus' use of fire. Zeus wields bolts of fire, a powerful weapon, against his opponents. He also grants heavenly fire freely to mortals until the separation at Mekone, when he is angered by Prometheus. Prometheus then steals fire, carefully hidden in a fennel stalk, and brings it to men.¹³⁶ Hephaestus, the master metalworker and craftsman, works with fire in his forge and in the *Protagoras* myth he is the source of the fire which Prometheus steals for men. In a later account, Hephaestus' role broadens and he is portrayed as a teacher of the uses of fire. Other gods associated with fire are Hestia, goddess of the hearth, and luminous (*Φοῖβος*) Apollo who can create a dazzling, frightening fire.¹³⁷

This list of deities connected with fire points to a notable difference between fire and language. The part played by fire in Greek thought—and myth—is far more extensive than that allotted to speech and we find a series of patron deities who point to the source and different uses of fire. If gods create, bestow, steal, and preserve fire, as well as working and destroying with it, they do not use or manipulate language in the same way. There are, of course, gods associated with speech. Hermes appears—albeit in different

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There are human inventors associated with the discovery or spread of fire as well. We have already encountered (above, Sect. 2) a first man, Phoroneus who is said to be a firebringer. Phoroneus must have used his gift of fire when introducing scattered men to social life and founding the first community. Interestingly, according to a passage in Hyginus (*Fabulae* 143), these early men lived without cities or laws, but did speak a single language, even before Phoroneus' rule. Here, it seems, speech precedes fire.¹³⁸ Hellanicus assigned the discovery of fire and of armour to the people of Lemnos.¹³⁹ The Elder Pliny tells us that Pyrodes son of Cilex created fire from flint *ignem e silice Pyrodes Cilicis* (*NH* 7. 198), but this seems little more than a play on words.¹⁴⁰ Pliny immediately adds that Prometheus is to be credited with the preservation of fire in a fennel stalk. There is, incidentally, no inventor of language to be found among the hundred-odd divine, heroic, and human inventors of arts and crafts named by Pliny in his catalogue.¹⁴¹ Discussions of the invention or source of fire feature more frequently in ancient writings than accounts of the origin of language. At the same time, Greek thinkers often point to speech as a criterion to distinguish humans from animals (above, Sect. 2.2), but only rarely refer to fire as another such marker. Diogenes the Cynic is said to have pointed out that animals manage quite well without fire, and he blames Prometheus for bringing fire to mankind. The use of fire, Diogenes argued, is a negative practice leading to softness, luxury, and ultimately a more difficult life.¹⁴² It is again worth noting (above, Sect.

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2.4) that while Cynics were willing to give up all the 'refinements' of civilization, including cooked food, clothing, marriage, and the avoidance of incest and cannibalism, they never considered relinquishing their use of speech. We do not find any Cynic disavowal of human speech and while Cynics often delighted in shocking onlookers by their public displays of unconventional behaviour, no Cynic is said to have flaunted silence. Perhaps the strongest objection by a Cynic to any form of communication is the statement attributed to Antisthenes that people should not be taught to read for fear of being corrupted by others.¹⁴³ If fire, in the Cynic view, is superfluous and the root cause of much evil, language is not.

Mastering Fire and Mastering Language

The use of language and the control of fire are perhaps humankind's greatest abilities. These capacities are universal—language and fire are found in every known human civilization—and exclusively human achievements.¹⁴⁴ Modern researchers note the many parallels between these two capacities. Both the mastery of fire and of language underlie all civilizations and were undoubtedly part of the civilizing process; both are overarching capabilities which lead to a whole series of further developments; both involve a mental process, as well as requiring social interaction and a technical or physical ability; both greatly enhanced humans' ability to survive in their competition for resources with non-humans. Finally, both needed to be mastered only once, for after fire and language were first acquired by humans, their continued use depended on social organization and cultural tradition.¹⁴⁵

While some ancient narratives attribute the coming of language and of fire to single individuals, other Greek and Roman writers share the modern view that the use of both fire and language must have developed in stages. Modern thinkers suggest that the mastery of fire involved three stages of increasing control: (1) the passive use of natural fire for heat, light, and cooked food, (2) the ability to col-

¹⁴³ Antisthenes: Diog. Laert. 6. 103; see too Dio Chrys. *Or.* 10. 16 and Philemon fr. 96 K.-A. for negative evaluations of human reasoning (*διάνοια* and *λόγος* respectively) as superfluous. Contrast Diog. Laert. 6. 73 and 6. 24 where Diogenes the Cynic is said to attach great importance to *λόγος*—speech and/or reason.

¹⁴⁴ See Goudsblom 1992, esp. 1–3. He notes that modern anthropologists ignore, at times, the pivotal role of fire in human civilizations.

¹⁴⁵ See Goudsblom 1989, esp. 162–3; 1992, chs. 2–4 and 9. In ch. 6 of his book he includes a survey of the practical uses of fire in ancient Greece and Rome.

lect, transport, and preserve fire, and (3) the deliberate kindling of a fire. These stages are very similar to the scenario suggested by Vitruvius.¹⁴⁶ We have seen that according to Vitruvius (*De Architectura* 2. 1–3), fire has a natural origin, for the first fire which humans will feed and preserve comes from tree branches rubbing against one another. These early humans, who overcome their fear of flames and learn to appreciate the great advantage of heat, then add logs to keep the fire going. Here, Vitruvius' humans of long ago go beyond using the gifts supplied by nature—beyond the kind of action involved in sheltering in a cave or feeding on fruit—and improve matters by dint of their own efforts. They also act as a group, with no particular individual credited with the discovery or preservation of fire. The fire-feeders then call in others, using gestures (*nutu monstrantes*) to demonstrate the benefits of fire. Perhaps these additional men are needed for gathering wood, for fire is more easily preserved by a group.¹⁴⁷ After men begin to associate together through the discovery of fire, they gradually learn to speak with one another, according to Vitruvius' account, and the process of language acquisition which he outlines is similar to that involved in the mastery of fire. Here, too, men move from a natural phenomenon—in this case, their ability to produce sound—to learning how to refine and develop this natural gift by articulating sounds. The next stage of language acquisition is one of deliberate creation, with humans coining words, that is, using an articulate sound to signify an object.¹⁴⁸ The progressive mastery of language by Vitruvius' early humans seems to be the product of a group effort, as was their domestication of fire. It is worth noting that while Vitruvius sets out succinctly all the stages leading to the complete mastery of language, he does not tell us, in parallel fashion, how men reach the final stage in domesticating fire, learning to produce fire at will.

Not all modern scholars agree with Vitruvius' hypothesis that fire preceded language, and they approach the issue in two rather different ways, using both psychological reasoning and archaeological evidence. The psychological argument is that only if

¹⁴⁶ Goudsblom (1989, 162–3) bases this model of the acquisition of fire on one outlined by James Frazer; see too Goudsblom 1992, ch. 1.

¹⁴⁷ See Cole 1967, 32 and 35.

¹⁴⁸ Modern scholars do not seem to note these parallels between the stages of domesticating fire and those of language acquisition. This is especially surprising in the case of Goudsblom 1989, an analysis of the close links between humans' control of fire and their capacity for communication.

humans possessed some sort of language would they dare to convince one another that fire could be approached and tamed. 'It is hard to imagine fire, which all other species fear and flee from, being tamed and handled by a species with no kind of secondary representational system . . . a language, even a protolanguage, uncouples stimulus and response allowing its owner to look objectively at things that . . . might arouse emotions too violent to control.'¹⁴⁹ This claim is speculative, and other modern thinkers side with Vitruvius and reverse the sequence, claiming that it was their experience of fire which stimulated the imagination of early man to invent speech.¹⁵⁰ Archaeological remains provide a firmer basis for argument and scholars generally agree that such remains indicate that *homo erectus* was the first human to use fire extensively; they are less certain that *homo erectus* possessed language abilities.¹⁵¹ Language, of course, does not leave the material traces that fire does.

Classical authors are similarly divided on the question of the chronological, causal, and psychological links between language and fire. Diodorus of Sicily and Lucretius are two ancient authors who published their works not long before Vitruvius, and they may have influenced him.¹⁵² Both Lucretius and Diodorus discuss the origins of language and of fire, but their accounts differ from that of Vitruvius. Diodorus, in fact, includes two (inconsistent) accounts of the discovery of fire in the first book of his *Bibliotheca*. In a general survey of the beginnings of humankind (discussed below, Sect. 5), Diodorus describes language as the very first art of civilization developed by early humans. Unlike Vitruvius, he imagines that primeval men began to use fire only after they learned to speak. Diodorus also tells of the discovery of fire in his narrative on the early history of Egypt (see above, Sect. 1).¹⁵³ There he states that fire

¹⁴⁹ Bickerton 1990, 141.

¹⁵⁰ See Hewes 1992, 16, who surveys earlier discussion and compare Goudsblom 1992, 13–14. Goudsblom 1989 argues that fire was conducive to the development of language.

¹⁵¹ See Leakey 1994, xiv (but see 129); Lieberman 1998, 80; Beaken 1996, 84 and 93–4; Goudsblom 1989, 164 and 1992, 17. See too above, Sect. 3.

¹⁵² Vitruvius wrote the *De Architectura* after 27 BCE, while the *terminus ante quem* for Diodorus is 30 BCE; see Cole 1967, 15 with n. 1, who finds no firm evidence for Diodorus influencing Vitruvius directly, but pays close attention to the parallels between the anthropological texts of the two writers in chs. 1, 2, and 4 of his book. Vitruvius mentions Lucretius and his contribution to knowledge (*De Arch.* 9, praef. 17).

¹⁵³ On the relation between Diodorus' two accounts of the beginnings of civilization, see Burton 1972, 50–1 and the further references below, n. 161.

was discovered by a single individual, Hephaestus, when a lightning bolt struck a tree and it caught fire (1. 13. 3). The man Hephaestus enjoyed the flames, added wood to the fire to keep it going, and then invited others to see the fire. Hephaestus was subsequently rewarded for his discovery by becoming the first king of Egypt, according to Diodorus. In this alternative, euhemeristic version of the discovery of fire, Diodorus again disagrees with Vitruvius. He locates the source of fire—a lightning bolt—in heaven rather than on earth, and he has a single, named individual recognize its benefits and discover the way to feed a fire, rather than a group. We first hear of speech—possibly the actual invention of speech by Hermes—during the reign of the third king Osiris (above, Sect. 1).

Lucretius also discusses the discovery of fire when telling of the beginnings of language and civilization.¹⁵⁴ He describes the ways in which humans could have learned to use fire, mentioning both lightning bolts (to which Diodorus will return) and the friction of tree branches rubbing together (to which Vitruvius will return). Both the lightning bolts and the sparks from trees are presented by Lucretius as natural, random phenomena: his fire is not a gift from Prometheus. The sun, Lucretius adds, taught humans to cook.¹⁵⁵ Unlike Vitruvius and Diodorus, Lucretius does not elaborate on the stages by which humans learned to control fire. In his account, fire is part of the process which leads to human acquisition of speech, but only part. Housing, clothing, fire, and, above all, family life cause humans to become softer and it is then that we first hear of language, as early men communicate in stammering fashion, by means of cries and gesture, and begin to form a regulated community with their neighbours.¹⁵⁶ Lucretius and Vitruvius, then, agree that fire came before language, but point to very different effects of fire which brought about speech, while Diodorus (in one of his two accounts) argues for the priority of language.

¹⁵⁴ Lucretius' account of fire is an appendix or footnote of sorts tacked on to his earlier account of the origin of civilization in *DRN* 5. 1011–28; he then continues the progress account at lines 1105 ff.

¹⁵⁵ *DRN* 5. 1091–1104. See Gale 1994, 177–8, who notes that Lucretius deliberately plays with the idea of fire as a gift from heaven, replacing Prometheus with a thunderbolt.

¹⁵⁶ *DRN* 5. 1011–23. We will return to Lucretius' ideas on the origin of language below (Sect. 5; see too Sect. 2.2).

5. MEN INVENT LANGUAGE TOGETHER

Vitruvius, Diodorus, and Cicero

Let us look more closely at Vitruvius' description of the development of language. The passage is compressed and difficult: several phrases can be understood in more than one way.¹⁵⁷

In eo hominum congressu cum profundebantur aliter e spiritu voces, cotidiana consuetudine vocabula, ut optigerant, constituerunt. deinde significando res saepius in usu ex eventu fari fortuito coeperunt et ita sermones inter se procreaverunt.

In this gathering of men, as they breathed forth different sounds, they fixed articulate sounds by chance in the course of their daily routine. Next, signifying the things they used more frequently, humans began to speak by chance according to the event.¹⁵⁸ Thus they produced conversations among themselves. (*De Architectura* 2. 1. 1)

We have seen that communication between Vitruvius' early people began with the gestures used by some to summon others to the fire. Next, as these men were gathered together on a daily basis they took advantage of their natural ability to produce varied—but confused—sounds and began to articulate sounds deliberately (*vocabula*).¹⁵⁹ These deliberate sounds are then transformed into words when they are assigned meanings, with the first words referring to objects of everyday use. People repeatedly made use of a chance association between sound and meaning as the need to coin a new word arose. They then began to speak, presumably after further increasing their vocabulary and learning to string individual words together, although Vitruvius does not specifically say so. Finally, there is full-scale communication with men initiating con-

¹⁵⁷ For various proposed emendations of Vitruvius' text, see Spoerri 1959, 141–2 and the further references there.

¹⁵⁸ Cole 1967, 63–7 suggests translating *ex eventu fari fortuito coeperunt* 'began to speak because of this fortuitous event' and thinks that the fortuitous event is the successful use of communication at a moment of crisis.

¹⁵⁹ For this interpretation of *vocabula* as articulate sounds rather than words, see the convincing arguments and parallels—particularly Diod. 1. 8. 2–3 and Cic. *Rep.* 3. 3 (both discussed below)—adduced by Cole 1967, 60–1 nn. 1–2. If we take *vocabula* to mean 'words' we can perhaps understand that these first words are individual ones, with different objects assigned different sounds by different people. Coining standardized words to be used by the group as a whole would then be the next stage of language development. Or else these original words are shared by all and the next stage of language outlined by Vitruvius involves expanding speech to larger syntactic blocks. Neither of these interpretations is immediately apparent from Vitruvius' text.

versations with one another. These talking, upright men then go on to build houses, according to the author of *De Architectura*, and subsequently develop, step by step, other crafts and disciplines.

It seems safe to conjecture that the men of Vitruvius' account developed language because it was advantageous to do so, just as we are told that they found it beneficial to use and preserve fire. Utility and expediency—and not, for instance, a desire to express emotions—are the reason for Vitruvius' original language. In this account, language is developed by a group of people acting together, with both nature and chance playing a part in the process. Nature supplies humans with their ability to emit different sounds and they learn to control and refine this natural ability in order to produce distinct, articulate sounds. While Vitruvius' text is difficult, it seems safe to say that chance is involved in both the formation of the first articulate sounds (see *ut optigerant*) and the assignment of meanings to words, the linking of signifier and signified (see *ex eventu . . . fortuito*).¹⁶⁰ One further point to be noticed is the role played by time: Vitruvius describes the invention of language as a process which develops in stages, over time.

Diodorus of Sicily

We find a more detailed account of the beginnings of civilization and the process of language acquisition in Diodorus Siculus. In the first book of his *Bibliotheca* (1. 8), Diodorus describes primitive humans' gradual ascent to civilized life, where men progress by their own efforts, taught by necessity.¹⁶¹ Diodorus' narrative of humans' ascent to civilization, written in the first century BCE, has sparked a great deal of scholarly interest because it is thought, by some, to be based upon anthropological speculations by Democritus or another fifth-century BCE thinker. The overall framework of Diodorus 1. 7–8—a description of the origin of the universe, followed by an account of the first living creatures, including man, and then an outline of the beginnings of civilization—seems to follow the sequence of cosmogony, zoogony, anthropogony, and, at times, anthropology, found in pre-Socratic writings such as that of Anaximander

¹⁶⁰ See, however, Spoerri 1959, 142 with n. 32 and compare previous note.

¹⁶¹ This progress account precedes his more detailed and rather different survey of early Egyptian civilization (see above, Sect. 1 and Sect. 4). These two accounts in Diodorus on the development of civilization are seen by some scholars as contradictory—see e.g. Spoerri 1959, esp. 162–3, 206–7. Cole 1967, 174–92 has a detailed hypothesis on the original ordering and interweaving of Diodorus' two accounts.

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and Archelaus.¹⁶² Many features of Diodorus' cultural history are reminiscent of the fifth-century descriptions of early man that we have looked at above. Diodorus' first humans are said to lead a disordered and beastlike life (*ἐν ἀτάκτῳ καὶ θηριώδει βίῳ* 1. 8. 1) and we have seen that these are two recurring words in early accounts.¹⁶³ There are several close verbal parallels between Diodorus' account and the *Protagoras* myth: both tales use virtually identical words to tell of early men who are scattered and dispersed before they learn to come together, of wars with wild animals, and of men learning to articulate speech.¹⁶⁴ While the exact relation between the passage in Diodorus and specific writings of the fifth century remains an open question, scholars are generally agreed that many elements of Diodorus' account, both of content and of wording, go back to the fifth century.¹⁶⁵ It would be particularly interesting for our purposes to know if the detailed outline of the origin of language found in Diodorus could be dated as far back as the fifth-century BCE, but this too cannot be established for certain.¹⁶⁶ The account of the means by which men discovered the best kind of diet for themselves, found in the late fifth century Hippocratic tract *On Ancient Medicine* (above, Sect. 4), points to the possibility that a similar outline of the stages of language development was composed at that time, but no such text survives.

According to Diodorus, primeval men are attacked by wild animals and it is expediency and fear which draw them together and

¹⁶² See Havelock 1957, ch. 3 esp. 74–5 and app. to ch. 5, 409–12; Blundell 1986, ch. 2; Guthrie 1957, 31–9; Kahn 1981, 100–3 and above, Sect. 3, on Archelaus.

¹⁶³ Compare in particular the opening of the *Sisyphus* fragment (*ἀτακτος . . . βίος καὶ θηριώδης* 1–2) above, Sect. 3, with Davies 1989, 18–19. See too O'Brien 1985, 264–5 with n. 5.

¹⁶⁴ Scattered and dispersed: *σποράδην* Pl. *Prot.* 322b; Diod. 1. 8. 1; coming together: *ἐξήγον* . . . *ἀβροίεσθαι* Pl. *Prot.* 322a; *ἀβροίεσθαι* Diod. 1. 8. 2; warring with animals: *τὸν τῶν θηρίων πόλεμον* Pl. *Prot.* 322b; *πολεμουμένους μὲν ὑπὸ τῶν θηρίων* Diod. 1. 8. 2; articulating speech: *φωνὴν καὶ νόματα* . . . *δηρῶσάτο* Pl. *Prot.* 322a; *διαβροῦν τὰς λέξεις* Diod. 1. 8. 3. See Morrison 1941, 9–10; Guthrie 1969, iii, 81.

¹⁶⁵ The bibliography on the source behind Diodorus 1. 7–8 is vast. See in particular Cole 1967, who expands and refines Reinhardt's original argument for the Democritean basis of the passage in Diodorus. Compare Spoerri (1959 and 1961), who contends that late Hellenistic sources probably underlie our text, but accepts that many motifs do go back to the 5th cent. BCE. Havelock 1957, 406 and Blundell 1986, 72 n. 22 include further bibliography. For the overall 5th-cent. origin of the Diodorus passage, see Guthrie 1957, 140–1 n. 9; Kerferd 1981, 141 with n. 2.

¹⁶⁶ Havelock (1957, 77–8) points to possible 4th- and 3rd-cent. BCE influences on this section of Diodorus, such as the use of the word *ὑποκείμενα*—which he translates as 'substantive data'—and Diodorus' division of the *οἰκουμένη* world into linguistic areas.

teach them to help one another (1. 8. 2). Their continued association slowly brings about an awareness of each other's characters (*ἐπιγινώσκειν ἐκ τοῦ κατὰ μικρὸν τοὺς ἀλλήλων τύπους* 1. 8. 2). This gradual evolution of a social sense then leads to the development of language. Diodorus seems to say here that society or at least a social awareness of sorts precedes speech and calls it forth. If later thinkers such as Rousseau conceive of speech and sociability as an insoluble chicken-and-egg problem, with society necessary for the invention of language and language indispensable for the formation of society, Diodorus thinks that social sensitivities precede and lead to language.¹⁶⁷

Or perhaps Diodorus is saying something else. While most commentators take the word *τύπους* in Diodorus' text to mean 'characters', and think that Diodorus is claiming that men gradually learn to recognize one another's behaviour before they begin to speak, Lovejoy and Boas take *τύπους* as 'signs' and translate 'they presently came to understand the signs they made to one another'.¹⁶⁸ According to this interpretation, some communication by gestures took place among Diodorus' early men even before they developed articulate speech; here we are reminded of Vitruvius' primeval gesturing men who summon others to the fire. The Christian writer Lactantius (c. 240–320 CE) has an account of early society quite similar to that of Diodorus and there he suggests that first men used gestures before vocal speech. Lactantius' early humans are said first to signify their desire by gestures and only afterwards to begin to develop speech (*primo nutibus voluntatem suam significasse, deinde sermonis initia temptasse*).¹⁶⁹ Lucretius, too, assigns gestures to prelinguistic men and we shall encounter in the following chapter ethnographic descriptions of foreign, remote peoples who never go beyond gestures to actual speech.¹⁷⁰

¹⁶⁷ See above, n. 75, and see Stam 1976, 81–2. The actual question of the chicken and egg is raised by Plutarch as one of the topics of his *Q. Symp.* 635e–638a.

¹⁶⁸ Lovejoy and Boas 1935, 221 with n. 39.

¹⁶⁹ *Inst. Div.* 6. 10. 13–14. Spoerri 1961, 79–81 with n. 83 notes the great similarity between Diodorus and Lactantius, but thinks that there are no gestures in Diodorus 1. 8; he takes *τύπους* (75 n. 68) to mean '[menschliche] Gestalt'. Lactantius' source is unknown, but may have been Cicero—see Spoerri 1959, 158 n. 8; Cole 1967, 64 n. 10. Cole (1967, 63–7) thinks that the accounts of Diodorus, Vitruvius, and Lactantius contain traces of a theory according to which the very first act of communication was a non-verbal one, used in a crisis; this successful act then led to the gradual development of speech.

¹⁷⁰ Gestures in Lucretius: below, text near nn. 209–10; remote peoples: Sect. 5.3.

There is one further sentence in this passage of Diodorus which suggests the possibility of gestures being used by early men even before they turned to speech.¹⁷¹ Diodorus, after outlining the beginnings of language, turns to the acquisition of other useful skills by primitive men. Humans begin with no clothing, housing, fire, or cultivated food and gradually learn to live in caves during the winter and to store fruits. They master the use of fire and slowly develop the technical and social arts (1. 8. 5–8). Diodorus then concludes his description of the advent of civilization by characterizing man as a creature who has necessity as his teacher and is well endowed by nature, possessing hands and speech and sagacity of mind to help him along.¹⁷² Language is presented here virtually as an innate endowment, along with hands and intelligence. We have already seen (above, Sect. 3) that Xenophon discusses human beings' hands, flexible tongue, and mental capacities—as well as their erect stature—in a single chapter of the *Memorabilia* (1. 4). The pre-Socratic Anaxagoras—who may underlie Diodorus' narrative here—links hands and intelligence, stating that man is the wisest of creatures because he possesses hands.¹⁷³ Diodorus adds a third element, language, and sees these three unique endowments of men as co-workers (*συνεργοί*), so that presumably language and hands work together. Is Diodorus referring to gestures here? Perhaps early humans used language and hands together at first, communicating both by sound and gesture (as do Psammetichus' children). Or perhaps gestures preceded speech, and language freed men from the need to gesticulate and allowed them to use their hands for other activities. Gregory of Nyssa argues that if it were not for their hands, men's facial features—the shape of their mouths, teeth, and tongues—would be like those of beasts, since they would have to eat

¹⁷¹ See Spoerri 1959, esp. 162, and 1961, 72, 77–8, who argues that Diod. 1. 8 is not a consistent whole and is composed of two separate and incompatible sections, 1. 8. 1–4 and 1. 8. 5–9.

¹⁷² καθόλου γὰρ πάντων τὴν χρεῖαν αὐτῇ διδάσκαλον γενέσθαι τοῖς ἀνθρώποις, ὑφηγουμένην οἰκείως τὴν ἐκάστου μάθησιν εὐθὺς ζῶν καὶ συνεργοὺς ἔχοντι πρὸς ἅπαντα χεῖρας καὶ λόγον καὶ ψυχῆς ἀγχύσιον (Diod. 1. 8. 9).

¹⁷³ Aristotle, *De Part. Anim.* 10. 687^a: Ἀναξαγόρας μὲν οὖν φησι διὰ τὸ χεῖρας ἔχειν φρονιμώτατον εἶναι τῶν ζώων ἀνθρώπων (= DK 59 A102; compare B21b). See too the statement by Galen, *De Usu Partium* 3. 1 (= iii. 168 Kühn) χεῖρας μὲν δὴ μόνος ἀπάντων ζώων ἀνθρώπος ἔσχευε, ὄργανα πρέποντα ζῶνι σοφῷ. (Aristotle himself argues the reverse, i.e. that man received hands because he is the wisest.) For the importance of human hands see e.g. Xenophanes DK 21 B15 and the further references cited by Dickerman 1909, 27–9 and Renehan 1981, 249. See too Vlastos 1946, 57 (= 1993, 336–7); Spoerri 1959, 148–52.

their food off the ground. In consequence, humans would only be able to bleat or baa or moo, for they would not be capable of articulate speech. It is thanks to hands, Gregory concludes, that men can speak.¹⁷⁴

Let us look more carefully at Diodorus' description of the stages by which a group of early men produce speech together.

τῆς φωνῆς δ' ἀσήμεον καὶ συγκεχυμένης οὐσας ἐκ τοῦ κατ' ὀλίγον διαθροῦν τὰς λέξεις, καὶ πρὸς ἀλλήλους τιθέντας σύμβολα περὶ ἐκάστου τῶν ὑποκειμένων γνώριμον οφίσιν αὐτοῖς ποιῆσαι τὴν περὶ ἁπάντων ἐρμηνείαν.

From meaningless and confused cries by slow degrees they articulated forms of speech and by agreeing among themselves on expressions for every object in front of them, created a mutually intelligible mode of communication about everything. (Diodorus 1. 8. 3)¹⁷⁵

Diodorus' primitive humans go from uttering senseless, confused noises to slowly articulating sounds. At this stage, apparently, men produce articulate, distinct sounds but attach no meaning to these utterances. Next they begin to coin words together, agreeing upon specific sounds, which serve as symbols or tokens for each of the various objects they encounter.¹⁷⁶ Their linguistic capabilities expand and eventually they are able to communicate to one another about everything. Diodorus' early humans seem to cooperate from the very start in creating a language together, jointly settling upon the words to be used to designate objects. Here it seems plain that language comes about as the result of a social compact with various members of the group suggesting to one another the sounds used as tokens to signify specific objects (καὶ πρὸς ἀλλήλους τιθέντας σύμβολα), that is, suggesting words, and these words are then accepted by the group as a whole.

The continuation of this passage of Diodorus makes it plain that the first forms of speech are conventional in more ways than one: not only are they the product of a convention or an agreement between members of the group, but there is also an arbitrary relation between word and object, not a natural fit. Diodorus posits a series of first languages, rather than a single original tongue, and he thinks

¹⁷⁴ See Gregory of Nyssa, *De Opif. Hom.* c. 8 p. 148d–149a and see Cole 1967, 40–2. Dickerman 1909, 15–17 esp. n. 1, brings a series of sources linking hands and speech and notes that the two are 'consociatae'.

¹⁷⁵ This translation is an adaptation of Guthrie 1969, iii. 81. For ἐμμενέειν as communication or speech see above, n. 12.

¹⁷⁶ See Whitaker 1996, 9–13 for a useful discussion of the meaning of σύμβολον in a linguistic context.

that different groupings of men went through the same phases of creating a language in different areas of the inhabited world. Each grouping developed its own form of speech. Not everyone speaks the same language, Diodorus explains, for each group composed words by chance (οὐχ ἀμόφωον πάντας ἔχειν τὴν διάλεκτον, ἐκάστων ὡς ἔτυχε συνταξάντων τὰς λέξεις 1. 8. 4). That is why there is every conceivable form of language, he concludes. Here Diodorus tells us that different groups of humans produced a first language in many regions of the inhabited world and did so together, by agreement. Different groups reached different agreements—and consequently different languages. The phrase ὡς ἔτυχε 'as it chanced' seems to indicate that names in the different first languages were assigned to objects arbitrarily, by chance, with no natural affinity between word and object.¹⁷⁷

Here it is worth looking at another account of the beginnings of language, that supplied by Cicero in book 3 of his *Republic*, which was composed some two decades before Diodorus' *Bibliotheca*.¹⁷⁸ Cicero's outline of the *stages* of language development is very similar to that of Diodorus, but he differs from Diodorus in the underlying factors which lead to speech. Cicero says nothing of social interaction between pre-linguistic humans and has men begin to develop speech under the influence of reason. The opening of book 3 of Cicero's *Republic* is lost, but Augustine tells us that Cicero speaks there of weak and troubled early humans for whom nature is a stepmother rather than a mother; men do, however, possess a divine spark of intelligence and reason.¹⁷⁹ We can now turn to Cicero's own words:

[mens] . . . eademque cum accepisset homines inconditis vocibus inchoatum quiddam et confusum sonantes, incidit has et distinxit in partis et ut signa quaedam sic verba rebus inpressit hominesque antea dissociatos iucundissimo inter se sermonis vincolo conligavit.

And when [reason] found men with stammering voices uttering unformed and confused sounds, she separated these sounds into distinct classes, assigning words to things as a kind of distinguishing mark. Thus with the most pleasant tie of speech she bound together previously solitary men. (*De Republica* 3. 2. 3)

¹⁷⁷ Compare Allen 1948, 36–7; Vlastos 1946, 52 n. 114 (= 1993, 353 n. 14).

¹⁷⁸ Cicero's *De Republica* is dated to 51 BCE.

¹⁷⁹ *divinus ignis ingenii et mentis* (Augustine, *Contra Iulianum* 4. 12. 60).

Cicero's early men, like those of Diodorus, use only confused and inchoate sounds at first. Reason—presented here virtually as an outside, independent entity, rather than as an integral part of humans—then sorts and distinguishes these noises so that men produce articulate sounds. These distinct sounds are then formed into words which are assigned to objects as markers of sorts. It is worth noting that it is sounds which need to be sorted here and the question of the sorting or classifying of the world, with its manifold objects and phenomena, does not arise. Language, according to Cicero, then serves as a bond to forge ties between people and create a society. Cicero outlines a chronological sequence of (1) rational thought, (2) speech, and (3) society, in this brief history of early humans. By referring to the abstract *mens* as the impetus to speech—rather than positing that language arose from a group of intelligent, rational humans acting in concert—Cicero circumvents the difficult question of how pre-social humans can create a language together, a question raised, for example, by the *Protagoras* account (above, Sect. 3). Society, in Cicero's view develops only in the wake of language, while reason precedes speech.¹⁸⁰

We have already encountered several ancient authors who, like Cicero, think that thought precedes and serves as the stimulus to language, but these authors make no mention of the reverse phenomenon, the influence language has on thought. Dio Chrysostom provides a rare description of the reciprocal effect of human speech and thought. In his *Olympicus* Dio includes an engaging description of early men for whom reason comes before language; these humans transform thought into words, delighting in their newly discovered power of naming. He states that early humanity was particularly close to the divine: surrounded by the heavens and earth, the stars and the sea etc., men could not remain without understanding. Dio then goes on to describe humans 'uttering the sweetest and most distinct sound, and taking pleasure in the pride and intellectuality of human speech (ἀγαπῶντες τῆς ἀνθρωπίνης φωνῆς τὸ γαῦρον καὶ ἐπιστήμον), stamping symbols on things that came into their perception, so as to name and point out everything they thought of (ἐπιθέμενοι σύμβολα τοῖς εἰς αἴσθησιν ἀφικνουμένοις ὡς πᾶν τὸ νοητὸν ὀνομάζειν καὶ δηλοῦν), easily acquiring thereby memories and

¹⁸⁰ Compare Cic. *De Off.* 1. 50–1 where reason and speech (*ratio et oratio*) are said to underlie human society.

conceptions of an infinite range of things'.¹⁸¹ Here, Dio not only points to the role speech plays in expressing thoughts and perceptions; he also notes how thought and memory develop in the wake of language.

Returning to Cicero, Diodorus, and Vitruvius, we find a strong parallel between the stages leading up to a language as depicted in these three authors¹⁸²—confused sounds, articulate but meaningless utterances, the assigning of names, and ultimately full-fledged language—and the stages of language acquisition by children. Infants, modern researchers note, first cry and coo, and then babble, practising the articulation of sounds. Next young children learn to use single words and discover the power of names. Children then continue along the road to full-fledged language, combining words and forming increasingly complex syntactical units.¹⁸³ The phylogeny of language found in Cicero, Diodorus, and Vitruvius is in many ways parallel to the ontogeny of speech, as we know it today, and perhaps even as the ancients themselves knew it. It is possible that Cicero, Diodorus, and Vitruvius (or their sources) were unconsciously attributing what they had observed of children's acquisition of speech to primeval man. Yet, the process of developing a primeval language is plainly more complicated than that of a child acquiring an already existing tongue.¹⁸⁴ When words are assigned to objects, it is not only sounds that need to be distinguished and ordered: the objects, too, must be organized and classified. For children, the world is divided up into segments by their parents, but who classified and distinguished objects to be named for primeval humans? Cicero, Diodorus, and Vitruvius are not troubled by this question. These ancient thinkers imagine early humans confronted by a world full of objects, external objects regularly found in front of them—compare Diodorus' *περὶ ἐκάστου τῶν ὑποκειμένων* and Vitruvius' *res saepius in usu*—to which they gradually attach names. Speech is the naming of external physical objects and not, for example, the external expression of inner thought or feeling.

¹⁸¹ Dio Chrys. *Or.* 12. 28; the translation is that of Russell (1992, 179) in his commentary ad loc. Compare too 12. 65 where Dio notes that men, lacking except in relation to voice and speech, have an incredible wealth of language, giving names—sometimes more than one—to everything they perceive.

¹⁸² See Cole 1967, 61 n. 2 for other ancient sources which list these stages of language, most notably Hor. *Sat.* 1. 3. 103–4.

¹⁸³ Bornstein 1996 is a very useful survey of the beginnings of infant communication; see too Aitchison 1996, ch. 8, and above, Sect. 3.2.

¹⁸⁴ See above, Ch. 3 *passim*.

Democritus, the Cratylus, and Conventionalism

We have seen that Diodorus not only tells of the gradual, successive stages by which early humans, taught by necessity, develop speech, but also touches upon the nature and creation of names in first languages. Diodorus' original languages are accidental, haphazard affairs, and many scholars trace this view of language, with its arbitrary (and imperfect) relation between name and object, back to Democritus.¹⁸⁵ In his commentary on Plato's *Cratylus*, Proclus tells us that Democritus saw names as conventional (*θέσει*) rather than natural (*φύσει*) and he cites four arguments made by Democritus to substantiate this claim: (1) the existence of homonyms, that is, one word for two different objects, (2) the existence of synonyms or two different words for a single object, (3) the fact that names can be changed at will, and (4) the existence of things for which there are no words.¹⁸⁶ The comments cited by Proclus on the limitations of language and the lack of a one-to-one mapping between words and things would fit nicely into a discussion of a piecemeal and random form of language developed by early humans. Democritus seems to have discussed the evolution of society and culture and he may have included an analysis of the origin and development of language as well.¹⁸⁷ Some scholars suggest that the discussion in Plato's *Cratylus* (427a–d) on the means to build words from basic elements is influenced by Democritus' atomism: the Atomists refer to letters being like atoms.¹⁸⁸ It is also worth noting that Democritus supplies us with the earliest instance of the use of the word *ἄλογα* to refer to

¹⁸⁵ See e.g. Guthrie 1965, ii. 473–5; see too 1969, iii. 206 n. 2 and compare Baxter 1992, 157–8 n. 241; Vlastos 1946; Cole 1967, 67–9. See too above for the alleged influence of Democritus on Diodorus 1. 7–8.

¹⁸⁶ DK 68 B26 = Proclus, *In Cratylum* 16. The four features are termed *πολύσημον, ἰσάροπον, μετέωρον, ὀνόμαζον* respectively. Barnes 1982, 468–70 offers a different interpretation of the intent and content of Democritus' words here. For a modern recasting of Democritus' arguments, see Harris 1980, 103–4. Democritus also refers, puzzlingly, to the relation between word and thing and the validity of names when he describes the names of gods as *ἀγάλματα φωνήεντα* (DK 68 B142), variously translated by commentators as 'voiced images', 'statues with voices', 'images in sound', and 'speaking images'. The attribution of this fragment to Democritus may be a scribal error—see Baxter 1992, 158 with n. 245 and Steiner 2001, 123 with n. 177. See Guthrie 1965, ii. 475–6; Cole 1967, 68 n. 17; Barnes 1982, 468–70 for different interpretations of this enigmatic fragment.

¹⁸⁷ Cultural history fragments of Democritus: DK 68 A75; A151; B144, B154. See too the further fragments cited and discussed by Havelock 1957, 115–84.

¹⁸⁸ DK 67 A6. See Gentinetta 1961, 60–7; Kraus 1987, 164–7 and above, Sect. 2.1 with n. 36.

creatures without speech (or reason), that is, animals, and this too would suit a context in which (early) speaking men are distinguished from animals.¹⁹⁹ Yet we cannot be certain that Democritus discussed the *beginnings* of language, even if we are willing to credit him with a rudimentary semiotic theory.²⁰⁰ An interest in the conventional (or natural) relation between words and things does not necessarily entail an investigation into the very origin of language.²⁰¹ (And, as we have seen throughout this chapter, the reverse is certainly true: a discussion of the beginnings of language need not touch upon the nature of names at all.)

Plato's *Cratylus* is devoted to a lengthy examination of the correspondence between words and objects, but barely discusses the origin of words and language. In this debate between Cratylus, Hermogenes, and Socrates on the nature of words, it does not much matter who the source of words, the namegiver, is: it is the character of his words that count.²⁰² Hermogenes of the *Cratylus* argues that words are correct designation of objects simply because of convention and agreement, while Cratylus believes in a natural fit between word and thing. Socrates will argue for a middle ground between these two views. The source of words or namegiver, termed a *νομοθέτης*, *ονοματοθέτης*, etc., is presented in the *Cratylus* in several different ways. When pressed by Socrates to explain how original, naturally correct names first arose, Cratylus will imagine the name-setter to be divine.²⁰³ Elsewhere in the *Cratylus* namegivers are said to be human, either single individuals, sometimes termed skilled or

(too) clever, or else groups of humans, often situated in the remote past. There seem to be barbarian namesetters as well.²⁰⁴ The discussion in the *Cratylus* touches only briefly upon the earliest form of (Greek) speech. We hear of primary names of an original language which have subsequently been embellished and distorted.²⁰⁵ Some words are said to have been first found in foreign languages before being adopted by the Greeks.²⁰⁶ None of this is set in any sort of social context in the *Cratylus*. We learn nothing of the namegiver's motive or reason for inventing speech; there is no discussion of the place of speech in the development of civilization; no talk of the necessity or benefits of communication; no reference to the surrounding circumstances and wider human community. As one commentator puts it, 'on the *Cratylus* view, the . . . name-giver might as well have bestowed his gift on apes or peacocks'.²⁰⁷ Plato's namesetter is no named *πρῶτος εὐετής*, divine or human, who brings a crucial element of civilized life to helpless humans: he is a shadowy, abstract figure, virtually a convenient device to explain our use of language.²⁰⁸

It is customary to use the contrasting terms conventional (*θέσει*) and natural (*φύσει*) when discussing both the origin of language and the relation between words and things. This distinction goes back to ancient authors, but the terminology is confusing.²⁰⁹ We have already seen how the language developed by the early men of Diodorus' account can be said to be conventional; at the same time it can be termed natural as well. The gradual evolution of speech, going from meaningless noises to articulate sounds and then actual words, is a natural progression, as men gradually learn, to their

¹⁹⁹ DK 68 B164. In this fragment Democritus compares the attraction of like to like into herds in the animal world with the aggregation of atoms, but scholars suggest that there was a comparison with men forming societies as well. See Ukkull-Gyllenband 1924, 31; Havelock 1957, 118; Cole 1967, 110–11.

²⁰⁰ See Barnes 1982, 468–70; Baxter 1992, 156–60 for two different suggestions on the content of Democritus' semiotic theory.

²⁰¹ See esp. Fehling 1975, 218–29. Pinborg 1975, 69–70; Barnes 1982, 466–7; Sluiter 1997, 178–9 etc. also distinguish between these two questions.

²⁰² The Pythagoreans are said to have been the first thinkers to have introduced the figure of the namesetter or *ονοματοθέτης*. Pythagoras supposedly gave the second place in wisdom to the one who set down names for things (*ὁ τοῖς πράγμασι τὰ ὀνόματα θέμενος*); first place is reserved for number. The Pythagorean inventor of names, like that of the *Cratylus*, is an indeterminate figure—either a god, daimon, or divine man—and should not be identified with Pythagoras himself. While Pythagoras introduced a whole series of new words, he clearly was not an inventor of language *per se*. See Aelian, *VH* 4. 17 = DK 58 C2; Iamblichus, *VP* 82 = DK 58 C4; Cic. *Tusc.* 1. 25. 62 and the discussions in Kraus 1987, 39–40; Vogel 1966, 135–6, 218–20.

²⁰³ *Crat.* 438c; see 397c and 425d.

²⁰⁴ Single (clever) individuals: 389a, 404c, 424a, 431e, etc. Group: 401b, 418a, 439c, etc. Ancient: 397c–d, 411b, etc. Barbarian: 390a.

²⁰⁵ *Crat.* 418a–c; see 399a and 414c–d. In some passages of the *Cratylus*, first names are taken as simple, more basic elements of language which underlie—logically and not necessarily temporally—more complex words. See e.g. 421e–422c with Robinson 1955, esp. 226 (= 1969, 106) and Anagnostopoulos 1973–4, esp. 318–25; both argue persuasively against the idea that the *Cratylus* is concerned with the origin of language. Compare too Baxter 1992, 41–3.

²⁰⁶ *Crat.* 409d–e; see 389d–e; 421c; 425d–e.

²⁰⁷ Barnes 1982, 468.

²⁰⁸ See Kretzmann 1971, 128–9; compare Rosenmeyer 1998, 51–2; Robinson 1955, 225–6 (= 1969, 104–6).

²⁰⁹ See e.g. Aulus Gellius 10. 4. 2; Ammonius, *In Arist. de Int.* 34, 15 ff. (Bosque); Proclus, *In Cratylum* 17. The latter two authors note that there is not always a sharp distinction between 'natural' and 'conventional'. See too Allen 1948, 36–7, 52–3 and Fehling 1965, 218 ff.

benefit, to communicate. No individual, either divine or human, arrives on the scene with a ready-made form of speech, so that in this sense, language has a natural origin. At the same time this language is produced by the collective agreement or compact of a society of humans, and meanings are attached to words arbitrarily, so that convention underlies the language as well. In the next account of the beginnings of human language that we shall look at, that of Epicurus, the earliest form of speech is natural in an entirely new way.

Epicurus, Lucretius, and Diogenes of Oenoanda

We have seen that Epicurus probably discussed the origins of language when writing about the beginnings of civilization in book 12 of his lost *On Nature*. There is also a brief account of Epicurus' views on how early humans created a language in his extant *Letter to Herodotus* (75–6). This section of the *Letter* is a virtual minefield, with scholars arguing vigorously over the exact wording of the Greek text as well as its precise meaning.²⁰⁰ Epicurus apparently discussed the origins of civilization at length in book 12 of *On Nature*, but in the *Letter* we find only a brief sentence on the role of nature in the development of civilization, before Epicurus turns to a discussion of language.²⁰¹ Nature, we are told, both teaches and is educated, sometimes by necessity; it is also augmented by the discoveries of reason. Epicurus then outlines the development of language—where he immediately makes use of these concepts of nature, necessity, and reason—and states:

... τὰ ὀνόματα ἐξ ἀρχῆς μὴ θέσει γενέσθαι, ἀλλ' αὐτὰς τὰς φύσεις τῶν ἀνθρώπων καθ' ἕκαστα ἔθνη ἴδια πασχούσας πάθῃ καὶ ἴδια λαμβανούσας φαντάσματα ἰδίως τὸν αἶρα ἐκπέμπειν στελλόμενον ὑφ' ἑκάστου τῶν παθῶν καὶ τῶν φαντασμάτων, ὡς ἂν ποτε καὶ ἡ παρὰ τοὺς τόπους τῶν ἐθνῶν διαφορά ᾗ.

... in the beginning names did not come into being by coining. Rather, the very nature of humans—in their different tribes—experienced individual feelings and received individual impressions. Each of these feelings and impressions caused them to exhale and dispatch air in their own individual manner and also according to ethnic differences from place to place. (*Letter to Herodotus* = Diog. Laert. 10. 75)

²⁰⁰ Sedley 1973, esp. 17–23; Vlastos 1946; Brunschwig 1994; Snyder 1980, ch. 1; Long and Sedley 1987 all have useful commentaries. I have used the text—and adapted the translation—of Sedley 1973; see too Long and Sedley 1987, i. 97 and ii. 98.

²⁰¹ For a discussion of the wider framework of cultural development succinctly outlined by Epicurus in the opening of section 75 of the *Letter*, see Brunschwig 1994, 22–4.

This is all that Epicurus tells us of the first stage of language. In the second stage, reason and convention play a part as well, according to the *Letter*.

ὑστερον δὲ κοινῶς καθ' ἕκαστα ἔθνη τὰ ἴδια τεθῆναι πρὸς τὸ τὰς δηλώσεις ἦτον ἀμφιβόλους γενέσθαι ἀλλήλαις καὶ συντομωτέρως δηλουμένας· τινὰ δὲ καὶ οὐ συναρμόμενα πράγματα εἰσφέροντας τοὺς συνειδότας παρεγγυῆσαι τινας φθόγγους· τοὺς (μὲν οὖν) ἀναγκασθέντας ἀναφωνῆσαι, τοὺς δὲ τῷ λογισμῷ ἐλομένους κατὰ τὴν πλείστην αἰτίαν οὕτως ἐρμηνεύσαι.

Later words were coined jointly within each tribe in order to make designations less ambiguous and more succinctly expressed. Also the men who were aware introduced certain unseen entities and brought words for them into usage. Hence some men gave utterance under compulsion and others chose words rationally and it is thus as far as the principal cause is concerned that they achieved self-expression. (*Letter to Herodotus* = Diog. Laert. 10. 76)

Epicurus' ideas here are strikingly original. All the Greek thinkers who preceded him saw language as a fabrication of sorts, by humans or by gods: speech is either an instant invention or else a slowly evolving product of society. Here Epicurus argues for a natural origin of language in the strongest sense of the term: names are evoked—actually prompted—by nature, with men's feelings and impressions giving rise directly to sounds. Epicurus' first men speak under the compulsion of nature (τοὺς (μὲν οὖν) ἀναγκασθέντας ἀναφωνῆσαι), and it is only at a later age that humans use reason (τοὺς δὲ τῷ λογισμῷ ἐλομένους 76).²⁰² Ancient authors who cite Epicurus' views will speak of words bursting forth from primitive humans according to circumstances; their speech is said to be instinctual, akin to sneezes, coughs, and groans.²⁰³ Thus first words are doubly natural: they arise directly and naturally, and there is a natural fit between word and object, since impressions and feelings shape the very vocal sound. An intriguing question is what such a first, natural language was like in Epicurus' view. Was it 'an articulated language with conceptual meaning and objective reference ... possessing a semantic and syntactic organization from the very first

²⁰² See Sedley 1973, 18–19 and 59, who compares—in addition to Lucretius 5. 1028 *natura subegit* (see below)—the fragment of the Epicurean, Demetrius Lacon *φύσει δὲ τὰς πρώτας τῶν ὀνομάτων ἀναφωνήσεις γεγενῆσιν λέγεσθαι* (P. Hercul. 1012 [xvii. 7–10]). Sedley notes that ἀναφωνῆσαι is used of primitive, instinctive speech.

²⁰³ Bursting forth: Origen, *Contra Cels.* 1. 24 = Usener fr. 334; Sarcophagi and groans: Proclus *In Cratylum* 16 = Usener fr. 335.

moment of its emergence'? Perhaps.²⁰⁴ Long and Sedley have a fascinating hypothetical outline of the three stages of language development according to Epicurus. They suggest that when primitive men instinctively uttered different sounds in reaction to different feelings they were able to communicate in a rudimentary way, using uninflected nouns, adjectives, and verbs for sensations (such as 'pain' or 'cold') and immediate sense impressions (such as 'horse', 'blue', or 'run'). The conventional refinements introduced for clarity and conciseness were inflections, conjunctions, and pronouns, according to Long and Sedley. In the third stage, words were given additional, more theoretical meanings by knowledgeable men.²⁰⁵ While we cannot know if Epicurus envisioned the several stages of language in quite this way, it does seem clear that Epicurus saw early men as using speech, a distinctly human form of language, from the very start. This speech is quite distinct from animal communication, for Epicurus and later Epicureans drew a sharp line between animals and humans. If in the societies outlined by Diodorus and Vitruvius humans begin to communicate with senseless cries and only gradually articulate meaningful words, in the Epicurean scheme they master language from the beginning.²⁰⁶

Another important innovation found in Epicurus is that he imagines a series of original, natural languages rather than one single universal tongue. The fact that there are so many different languages was used prior to Epicurus as a strong argument for the conventionality of words. Hermogenes, for instance, presents this claim in the *Cratylus* (385d-e). Epicurus turns this argument on its head and contends that it is precisely because language is natural that we find a variety of natural tongues. Climates, circumstances, and races vary in different places, and divergent languages simply reflect the

²⁰⁴ Thus Brunschwig 1994, 34, who makes use of the phrase *ὀνόματα καὶ ῥήματα* found in Diogenes of Oenoanda (fr. 12, ii. 13-14 Smith; see below, text near nn. 220-2) to substantiate this claim. (Brunschwig also discusses—and dismisses—the argument that Epicurus' first stage of language is a private one, with each individual producing his own unique language.) Compare Vlastos 1946, 51-3 (= 1993, 352-4): 'In Epicurus' first stage, we find a system of natural sounds which though rough and ready is language in all its essentials', and note his disagreement (n. 16) with those who contend that the first stage includes only emotional cries with no words for external objects. Compare the reservations of Cole 1967, 61 n. 3.

²⁰⁵ Long and Sedley 1987, i. 100. Their division into a basic and more complex language reminds us of Bickerton's discussion of protolanguages and his distinction between pidgin and creoles; see above, Sect. 2.2.

²⁰⁶ See Vlastos 1946, 51-3 (= 1993, 352-4); Brunschwig 1994, 34; Cole 1967, 61-2.

disparate, natural responses evoked by these varying factors of environment, ethnic group, and surroundings. Diodorus explains the diversity of languages as the product of different conventional agreements reached in the various earliest societies of men; Epicurus credits nature with this diversity. The influence of climate, geography, and race on individual languages is a subject that will occupy European intellectuals of the eighteenth and nineteenth centuries. Charles Nodier (1780-1844) is a notable representative of this approach. He speaks of the transparent skies, swaying palm trees, and cooing doves which influence the 'limpid, euphonic, and harmonious' languages of the Orient and South. In the harsh North, cracking fir trees, crumbling rocks, and the crash of falling cataracts lead to languages with 'raw and clashing vocabularies', according to Nodier.²⁰⁷ It is likely that neither Diodorus nor Epicurus would be unsympathetic to such an approach.

In a sense, Epicurus also reverses earlier arguments on the source of natural, Adamic names. The contention that the sound and meaning of a word correspond perfectly was used in two diametrically opposed ways by Greek thinkers. For Cratylus of Plato's dialogue the claim that there is a perfect fit between word and object compels him to conclude that the namesetter was divine. Epicurus, on the other hand, argues that names are natural—that is, they arise naturally, virtually instinctively, from the very impressions, feelings, and objects that they describe and *ipso facto* are a perfectly accurate reflection of them—precisely because he wants to explain human accomplishments without allotting any role to deities. We have already seen (above, Sect. 3) that early modern critics of the Bible made use of Epicurus in the seventeenth century in order to provide a secular, non-theological explanation for man's linguistic abilities. Eighteenth-century French thinkers will continue the attempts to demonstrate how languages could arise without divine intervention, by contending that words were originally mimetic, vocal imitations of things. Charles de Brosses, for instance, argues in his *Treatise on the Mechanical Formation of Languages* (1765) that

²⁰⁷ This passage from Nodier's *Notions élémentaires de linguistique* of 1834 is quoted by Genette 1995, 122-3. Genette surveys these discussions of what he calls 'geomimology', the flexibility of each language as it responds to the local climate and character of its speakers, in the writings of de Brosses, Gêbelin, Rousseau, and Renan. Olender 1992 and Lincoln 1999 point to some of the more sinister implications of the studies undertaken by 19th-cent. philologists, where race and language are linked.

a 'primitive, organic, physical and necessary language' underlies all existing tongues. Epicurus' ideas on the origin of language were as influential as they were original.²⁰⁸

Lucretius

The most important extant Epicurean is Lucretius, and in book 5 of his *De Rerum Natura* Lucretius provides us with a detailed outline of the primitive beginnings of humans and the development of civilization (925–1457), in which he includes a passage on the origins of language (1028–90). Lucretius agrees with his mentor Epicurus that language is the product of nature, but his exposition of the question differs in several interesting ways. For a start, Lucretius' canvas is much broader: he presents a full 'historical' survey of humankind's cultural development and locates the very beginnings of language in a specific context, at a particular stage of cultural progress. (Epicurus may well have provided such a framework in Book 12 of his lost *On Nature*.) We have already seen (above, Sect. 4) that Lucretius imagines that early humans begin to communicate in a rudimentary way once they have acquired houses, clothing, the use of fire, and—most important of all—established families. Early men soften under the combined influence of fire, sexual passion, and family life, and turn to their neighbours in order to form social pacts which will protect the weak (*DRN* 5. 1014–27). The circumstances surrounding men's first efforts at communication seem significant: humans have mellowed because of their improved physical and psychological situation and they use the rudiments of language with a wider circle of neighbours in order to achieve a social aim, the guarding of weaker members of society. Language is not created here in a vacuum: Lucretius' humans communicate in order to realize a political objective and they have a specific message to convey to their neighbours.²⁰⁹ The poet tells us that these early efforts at fashioning a social contract are done in stammering fashion, by means of cries and gesture (*vocibus et gestu cum balbe significarent* 5. 1022; see above, Sect. 2.2). Earliest language is, then, a rough and ready affair,

²⁰⁸ See Harris 1980, 56–7, who quotes the passage from de Brosses. Stam 1976, 22–7 discusses the ideas of two additional 'eighteenth century Epicureans' who see language as a mechanical invention, Pierre Gassendi and Julien Offray de la Mettrie, the author of *Man a Machine* (*L'Homme Machine*).

²⁰⁹ See Vlastos 1946, 53–5 (=1993, 354–6). Compare too the modern theory of Deacon (1997, esp. 401–8) that symbolic communication, and ultimately language, arose through the need to represent a social contract.

with men conveying their ideas to others by means of faltering sounds and gestures. Some commentators think that these stammers and gestures should not be granted the status of a language and are simply a pre-linguistic form of communication, but the social compact these men wish to create seems to require a real means of exchange.²¹⁰

Lucretius then points out how producing both sounds and gestures are natural, instinctive acts for humans. Even children too young to speak, are impelled to use gestures and instinctively point to things in front of them, Lucretius notes. Infants are innately aware of their natural powers, he adds, just as calves are aware of the use to be made of their incipient horns, cubs of their claws and teeth, and young birds of their wings (1030–40).²¹¹ The natural power of the infant here seems to be its ability to designate objects—if only by pointing—rather than its use of gestures in communication, but it is worth noting that Lucretius includes gestures both when outlining the beginnings of children's speech and when describing the language of early humans. In other words, Lucretius, too, uses the behaviour of young children (ontogeny) to recapture that of earliest humans (phylogeny), just as Cicero, Diodorus, and Vitruvius do.²¹² Lucretius goes on to make use of further examples from the world of animals in order to demonstrate how natural it is for men to emit different sounds in response to different feelings and objects.²¹³ He argues *a fortiori*: if inarticulate animals naturally emit various sounds to signal their various sensations and feelings, how much more likely it is that mortal men, equipped with vigorous voice and tongue, were able to indicate different things with different sounds (1056–90).²¹⁴

²¹⁰ See e.g. Konstan 1973, 44–5; Long and Sedley 1987, ii. 100 for this stage as pre-linguistic.

²¹¹ See too above, Sect. 2.2. In this passage, Lucretius mixes Greek-derived words (i.e. *scymmi*) and Latin ones when describing the calves, panthers, and cubs of 5. 1034–8. Sedley (1998a, 56–7) suggests that this hints at the Epicurean argument that humans naturally produce different sounds and languages in different regions.

²¹² On Lucretius' use of ontogeny to illustrate phylogeny, see Schrijvers 1974, esp. 353–6 (on gestures).

²¹³ Lucretius notes that animals make noises in response to emotions (*animi*), while humans react to objects (*res*) as well (e.g. 5. 1087–90). See Vlastos 1946, 54 n. 16 (=1993, 353 n. 16); Schrijvers 1974, 341 n. 11; Snyder 1980, 19–20 and see above, Sect. 2.2, on the natural expression of feelings.

²¹⁴ Lucretius' use of animals to explain human behaviour here seems un-Epicurean; see Long and Sedley 1987, i. 64–5 for an attempt to justify this approach and compare Brunschwig 1994, 34.

Language is created when the two innate abilities discussed by Lucretius—designating objects and uttering different sounds in response to different stimuli—are combined. Lucretius ties together the two factors of sound and designation (or labelling) in a pair of compressed and difficult lines:

at varios linguae sonitus natura subegit
mittere et utilitas expressit nomina rerum

It is nature which compelled men to emit the various sounds of speech and usefulness which fashioned the names of things. (*DRN* 5. 1028–9)

Scholars generally understand that both these lines refer to the first, natural stage of speech, with no hint here of the second, conventional phase of language described by Epicurus.²¹⁵ Both sounds and names, *varios sonitus* and *nomina rerum* are natural and instinctive, according to Lucretius, but are the making of sounds and the use of labels simultaneous events or two consecutive stages in the development of a first, natural language? It is easier for us to make sense of these lines if we posit an intermediary stage between sounds and names, a stage when men realized the convenience or usefulness, the *utilitas*, of naming. Once early men understood that the individual sound they instinctively uttered in response to a particular emotion or object could be used as a label for communicating with others, they would then naturally attach names to things, that is, use these natural sounds as names. In naming they would, presumably, be making use of their natural power of designation.²¹⁶

Lucretius also pointedly rejects the idea of a single inventor of language who taught others to speak, using a three-pronged argument. First, he raises the question of why a single individual—and not everyone—should have the power of speech (1043–5). Next, Lucretius wonders how this individual could have a preconception of speech and realize the potential of language use by himself, without hearing words from others (1046–9). And finally, he asks how the speaker could compel others to learn what seem to be meaningless sounds, comparing the process to teaching the deaf (1050–5). This last question raised by Lucretius—how a first language speaker ever caused a second person to realize that he was using a sound

²¹⁵ See Sedley 1973, 18 and Snyder 1980, 16–18 and the further bibliography there.

²¹⁶ See Sedley 1973, 18 with n. 91 (who quite rightly points to the parallel between *DRN* 5. 1028–9 and 5. 71–2); Bailey 1947, 1490–1; Cole 1967, 61 n. 3; Snyder 1980, 16–22. Spoorri 1959, 137 argues for a single-stage first language.

(or a gesture) referentially, to represent a concept—is one echoed by modern researchers to this very day.²¹⁷

Diogenes of Oenoanda

Some three centuries later, Diogenes of Oenoanda, another follower of Epicurus, will continue to poke fun at the idea of a single inventor of speech. In the second century CE, Diogenes erected a huge mural inscription outlining the teachings of his master, Epicurus. Extensive fragments of Diogenes' inscription have survived, and it is clear that he discussed both the origins of man (fr. 11 Smith) and the beginnings of civilization, including language (fr. 12). In the latter fragment, Diogenes tells of men devising housing and clothing, and discusses their learning to use a loom. Learning to weave is, according to Diogenes, a slow process which occurs over the passage of time. Weaving—or any other skill (τέχνην)—should not be assigned to Athena or one of the other gods, he adds, for all *technai* arise from needs and chance happenings, in conjunction with time.²¹⁸ This is a very clear statement of the view that men are responsible for the progress of civilization with need, chance, experience,²¹⁹ and time all playing a part. Next Diogenes turns to the origin of language, where he vigorously rejects the idea of either a divine or a single human inventor of speech.

καὶ τῶν φθόνων δὲ ἔνεκεν (λέγω δὲ τῶν τε ὀνομάτων καὶ τῶν ῥημάτων, ὧν ἐποίησαντο τὰς πρώτας ἀναφθένεις οἱ ἀπὸ γῆς φύντες ἄνθρωποι), μήτε τὸν Ἑρμῆν παραλαμβάνωμεν εἰς διδασκαλίαν, ὥς φασὶν τινες (περιφανὲς γὰρ αὐτῇ γε ὁδολεσχία), μήτε τῶν φιλοσόφων πιστεύωμεν τοῖς λέγουσι κατὰ θέαν καὶ διδασκῶν ἐπιτεθῆναι τὰ ὀνόματα τοῖς πράγ[μα]σιν, ἢ αὐτὸν ἔχωσι σημεῖα τῆς πρὸς [ἀ]λλήλους ἔνεκα ῥαδίας ἀποδηλώσεως οἱ ἄνθρωποι.

And in relation to vocal sounds—I mean the words and phrases of which the men born from earth created their first utterances—let us not introduce Hermes as a teacher, as some do (for this is patent nonsense), nor let us believe those philosophers who say that it was by deliberate invention and teaching that names were assigned to things, so that humans might have signs to facilitate their communication with one another. (fr. 12, ii. 11–iv. 3 Smith)²²⁰

²¹⁷ See e.g. Kendon 1991, 203 (and the passage he quotes there from Bickerton).

²¹⁸ πάσας [sc. τέχνας] γὰρ ἐγέννησαν αἱ χρεῖαι καὶ περιπτώσεις μετὰ τοῦ χρόνου (fr. 12, ii. 8–11).

²¹⁹ Perhaps Diogenes' περιπτώσεις—see the quotation in the previous note—should be understood as 'experiences', rather than 'chance happenings'.

²²⁰ This is a 'smooth' version of Smith's text (1993, 167–9) with no dots under doubtful letters, and with the supplement ἐχωσι σημεῖα, favoured by the majority of scholars, rather than Smith's suggestion ἐχωσι τὰ ὀνόματα.

The most interesting phrase in this passage is that used to describe the content of the first utterances by early humans, *ὀνόματα καὶ ῥήματα*. Normally *ὀνόματα καὶ ῥήματα* refer to nouns and verbs, which would mean that Diogenes claims that early men speak an articulated, well-ordered, syntactical language from the very start. Some modern commentators even make use of Diogenes' phrase in order to elucidate the nature of original language described by Epicurus, arguing that it was a well-formed language from the first.²²¹ Other scholars suggest that *ὀνόματα καὶ ῥήματα* should be understood here as 'words and phrases', which would mean a less developed original language: the first sounds emitted by humans were perhaps only the rough shape of what would subsequently become nouns and verbs in a language with grammatical paradigms.²²² We have seen in the case of Lucretius how a natural language could have developed in stages, and such a gradual evolution seems well suited to Diogenes' approach. In this very fragment (fr. 12), Diogenes describes the development of weaving as a process involving several stages: men first use leaves or hides as clothing, next use felted and then plaited clothes, and finally invent the loom and weaving. Language, too, could have arisen naturally, but gradually. Diogenes, like Lucretius, does not describe the later stages of language outlined by Epicurus, where convention and the deliberate coining of words play a part.

Diogenes is at his sharpest when ridiculing the idea of a single inventor of language. He rejects outright the claim that Hermes taught humans to speak, and then has fun imagining the way a human inventor of language would go about communicating his great discovery to others. This section of the stone (fr. 12, iv. 6-v. 14) is more damaged, but the gist of Diogenes' argument is clear. How, asks Diogenes, at a time when there were no kings and no writing—because there were no sounds—could a single individual assemble such vast multitudes?²²³ One would need an edict to bring

²²¹ See above, n. 204. Compare too, Horace, writing before Diogenes of Oenoanda, who has primitive men use verbs and nouns once they begin to articulate their cries and feelings in speech: *donec verba, quibus voces sensusque notarent nominaque invenere* (Sat. 1. 3. 103-4; see above, Sect. 3). *Verba* clearly is *ῥήματα*, while *nominata* is *ὀνόματα*; see too Snyder 1980, 21-2.

²²² See Bollack 1977, 795; Smith 1993, 373 and 453 n. 8. Compare too Diogenes' use of the expression *τὰς πρῶτας ἀναφθόνους* which is used of primitive instinctive utterances (above, n. 202).

²²³ The text here reads *ἀδύνατον . . . σ[υ]ναγαγεῖν μὲν τινα τὰ [το]σάδε πλήθη ἕνα*

about such an assembly, continues Diogenes, and even if the people were assembled, how would the inventor of language go about teaching others? Would he use a stick, like a schoolmaster, and touch each object, saying, 'this is to be called a "stone", this "wood", this "person", or "dog", "cow", "donkey" . . .'. This section of the inscription breaks off here, but enough has survived for us to see how Diogenes elaborates Lucretius' arguments against a single namesetter. We find a similarly playful description of human beings being taught a first language in the writings of Gregory of Nyssa. Gregory, who contends that God did not create language, wonders how God communicated some form of speech to humans. Are we to imagine God—he asks sarcastically—seated beside Adam and Eve like some pedagogue or grammarian, giving them a lesson in verbs and nouns?²²⁴ We have come full circle from early Greeks describing the divine invention or bestowal of language upon humans, to a Church father—no less—ridiculing the idea of God granting speech and didactically drilling people in grammatical forms.

The Greeks clearly recognized the crucial role played by language in the development of civilization. Speech is presented as a unique human capacity which contributed to the transformation of early beastlike men into full-fledged civilized human beings, whose advantage over animals lay in their rational, social, and technical capabilities. We have seen that the origin of language is attributed most often to a god or to a group of men, with no named human individual credited with the invention of speech.²²⁵ In some accounts, language follows upon the formation of an early, rudimentary society, while in others society is the result of humans' ability to communicate with one another. It is worth noting, incidentally, that in the Bible language apparently precedes society, for Adam names the animals in a social vacuum, before Eve is created: Adam possesses

τῶν[χά]ριον (fr. 12, iv. 6-10). William (1907, 81-2) suggests that *τοσάδε πλήθη* refers to words, not people, and thinks that Diogenes' argument is that at a time with no writing, no single person could remember the masses of words he invented and collect them all together. For the difficulties raised by this interpretation, see Chilton 1962, 164-6.

²²⁴ *Contra Eunomium* 2. 397, pp. 327-8 Jaeger.

²²⁵ For the semi-divine Orpheus as a namesgiver of sorts see DK 1 B13 and the Derveni papyrus xviii [xxii], 1-2; see too Cratylus 400c, 402a. Baxter 1994, 130-9 convincingly portrays Orpheus as someone who refashions and improves existing language, only occasionally introducing new names; see too Gambarelli 1989, 83-4.

speech even before human social intercourse is possible.²²⁶ In yet other progress narratives, thought is said to have preceded and led to language, but we rarely hear of the reverse effect, the influence language has on thought.

In the accounts we have looked at, language is viewed essentially as nomenclature, and the acquisition of language is seen as the ability to affix names to objects. Early humans encounter the physical objects found in the external world—pre-existing, neatly demarcated objects—and set about attaching a vocal sound to these objects as a label, after they have learned to articulate sounds. We are not told how the actual process of assigning names and inventing words works, and for an ancient account of the rationale behind the creation of words, we must turn to the literary critics, who discuss the original creators of language when describing Homer and the neologisms he coins. Homer, said to resemble those who first named things, creates new words which are exotic, vivid, and onomatopoeic, imitating the sound of an emotion or an action.²²⁷ Other ancient authors may well have imagined the process of coining words quite differently.

Most ancient thinkers do not go beyond visualizing speech as a collection of names or words for actual physical objects.²²⁸ Outside of Epicurus, we hear virtually nothing about the way in which more abstract words and concepts were created and even Epicurus does not seem to go beyond the view of language as a series of words. While several accounts present the development of language as a process, with speech developing in stages, over time, none of the narratives we have looked at provide any real description of the transition from a protolanguage of individual words to a full-scale, full-fledged working language with morphological rules and complicated syntactical structures. The question of grammatical paradigms and syntax does not arise in these ancient accounts of the beginnings of speech, although Manilius perhaps hints at such structures when he states in his progress account that the barbarous tongue of primitive man learned to accept *laws*.²²⁹

Perhaps the most striking feature of these ancient writings on the

²²⁶ Genesis 2: 19–20. See Harris and Taylor 1997, ch. 3, esp. 41–2.

²²⁷ See Demetrius, *De Elocutione* 94–6 and 220; compare Dion. Hal. *De Comp. Verb.* 16; Dio Chrys. *Or.* 12. 68.

²²⁸ Compare the discussion in Harris 1980, ch. 2, esp. 33–44.

²²⁹ *tunc et lingua suas accepit barbara leges* (Manilius, *Astronomica* 1. 85).

invention of language is the brevity and sparseness of the accounts. Greek or Latin, prose or poetry, early or late—virtually none of these narratives go much beyond the fact of a first language. We are told that speech is granted to early humans or developed by them, but are given next to no information about the character or purpose of this primordial speech. There are no colourful scenarios of early humans yearning to express their thoughts, needs, desires, or feelings, and we have no real idea of what the first words of their newly coined speech would have been. The nature of humankind's first language has proved no less elusive in these progress narratives than it was in accounts of the golden age.

Between Language and Speech

I. INTRODUCTION: LANGUAGE, SPEECH, AND COMMUNICATION

In the previous chapters, we have encountered a series of assumptions which the Greeks held about language. For one thing, language and speech are virtually interchangeable concepts in Greek eyes, for language is almost always discussed in terms of its expression through a vocal channel, as speech. So too languages are usually seen simply as a collection of words, a multitude of names. Another assumption is that, outside of golden age society, speech is the exclusive prerogative of humans. The possession of speech, *lógos*, is often thought to entail the capacity for rational thinking as well, and *logos* is, according to the Greeks, a specifically human ability, beyond the scope of animals. This chapter deals with a series of creatures, human and animal, who seem to challenge these assumptions. These beings are capable of communicating, but do not do so by means of ordinary speech. Most of these creatures possess some form of language but do not speak; others speak, but do not have a full-fledged language at their disposal. The unusual modes of communication used by these gesticulating philosophers, barking savages, weaving women, and talking parrots underline the distinction between language, speech, and communication, and we can no longer use the terms interchangeably. Language is a notoriously difficult concept to define, but it can be clearly demarcated from speech. Speech is the vocal expression of language: it involves both the possession of language—a mental system of signs and the relations between them—and the vocal, physical articulation of sounds. One cannot speak without having a language, but one can possess a language without exhibiting it vocally.¹ And so, for instance, linguists now recognize sign language as a full-fledged language,

¹ In fact language need not be expressed externally or used for communication; see Lyons 1988, 147; Danesi 1993, 28.

comparable to spoken tongues in its grammatical structure and expressive power.² Communication—more specifically animal communication—is much more limited than speech or language. Communication may be vocal—e.g. a dog barking—but creatures who communicate by means of sound do not necessarily possess language. The design features outlined by the linguist Charles Hockett in order to distinguish speech from the systems of communication used by animals are quite useful at pinpointing the much wider range of human language. Some outstanding features unique to human language are ‘displacement’, the ability to tell of matters removed in time or place from an immediate situation, ‘arbitrariness’, the absence of any logical relation between a physical, linguistic sign and its meaning, ‘productivity’, the ability to produce an endless supply of new utterances rather than a fixed, limited number, and ‘cultural transmission’, or the fact that a specific language is learned and not instinctive.³

The Greeks did not, of course, formulate or recognize the distinctions so carefully—and recently—drawn by modern linguists, but they did write, at times, of interesting creatures who point to the differences between language, speech, and communication. The following chapter is not meant to be a survey of all such beings, but a sampling of some of the more interesting ones. The linguistic capacities of these figures is closely related to their level of civilization or place in society. Often, humans at the margins of Greek society—women, slaves, and children—are thought to possess only a limited form of language and are not considered fully articulate. Creatures even more remote and exotic—non-Greeks or non-humans—are assigned, in some ancient writings, yet lower and more basic forms of communication. The simpler, more restricted means used by animals to communicate also serve to define the exact limits and contours of speech, which is considered a uniquely human capacity. Modern thinkers explore the nature and extent of animal communication both for scientific purposes and as an ethical issue, with implications about our right to make use of sentient, intelligent animals. We have already seen (above, Sect. 2.4) that Greek writers found the philosophical and moral questions raised by communicating animals no less compelling.

² See e.g. Crystal 1997, 222–7.

³ For a critical discussion of Hockett’s design features, see Harris 1980, 23–6; Crystal 1997, 400–1. Deacon 1997, chs. 1–4 is an illuminating discussion of the unique features of human language.

2. THE LANGUAGES OF PRIMITIVE PEOPLES

Let us begin with the non-verbal languages of primitive peoples. European thinkers of the seventeenth and eighteenth centuries often assumed that the culture of contemporary 'savage' peoples pointed back to earlier stages of their own civilization and language, or as John Locke famously said, 'In the beginning all the world was America.' When European travellers first encountered the native peoples of the New World, they thought that the culture of these exotic people reflected earlier stages of human development, including speech. In this fashion, ethnography merged with anthropology, for the investigation of actual people, distant in space was linked to the attempt to reconstruct the beginnings of civilization, the study of humans distant over time.⁴ In Greek writings, the assumption that primitive peoples preserve an earlier, original way of life is often more implicit than explicit, but some Greeks did study the primitive peoples of their own time in order to investigate their earlier selves.⁵ Thucydides, for instance, is a strong advocate of the argument that contemporary barbarian practices can teach the Greeks much about their habits of long ago.⁶ In Plato's *Cratylus* (397c-d) we find an interesting use of this kind of anthropological 'perspective' when it is stated that early Greeks believed in those gods in whom barbarians believe today.⁷ In the *Republic* (452c) we learn that ancient Greeks of long ago, like the barbarians of today, thought nudity laughable. We do not, however, find ancient writers consciously using contemporary barbarians to investigate the beginnings of speech.⁸ Nonetheless, the rudimentary or near lan-

⁴ See Pagden 1993; Todorov 1984; Schreyer 1987.

⁵ Sikes 1914, ch. 1 (1-24) notes that while Greek thinkers made use of examples from barbarians, they preferred to draw comparative anthropological conclusions from animal life.

⁶ See Thuc. 1. 5-6 esp. 1. 6. 6: πολλά δ' ἂν καὶ ἄλλα τις ἀποδείξει τὸ παλαιὸν Ἑλληνικὸν ὁμοίωσιν τῶν νῦν βαρβαρικῶν διατμήσεων. See the further references collected by Tuplin 1999, 61 n. 38.

⁷ See too *Laws* 680b (on political institutions). Vitruvius provides a Roman instance of this approach. He contends that the primitive types of buildings still used in Gaul and Spain, in Colchis and Phrygia, as well as remnants of earlier buildings at Athens, Marseilles, and Rome, point to the development of architecture from rude origins (2. 1. 4-5).

⁸ In fact, we find the opposite approach in Plato's *Cratylus* (425e-426a; compare 421d), where it is argued that certain Greek words were originally found in barbarian languages; see above, Sect. 2.1.

guages used by exotic peoples in Greek ethnography can provide a clue, at times, as to how Greeks saw the earliest form of language.

Non-Speaking Savages: Dogheads and Fisheaters

The non-verbal languages of two primitive peoples depicted in Greek ethnography, the Dogheads and the Fisheaters, are particularly illuminating. Ctesias, writing at the beginning of the fourth century BCE, presents a detailed picture of the Dogheads (*Κυνόκεφαλοι*) in his *Indica*.⁹ Ctesias was the first Greek author to devote an entire book to the marvellous people, places, flora, and fauna of India and while his *Indica* did not survive, we do have considerable remains—summaries and fragments—of the work. Ctesias tells us that the Dogheads or *Kunokephaloi*, are half-human, half-canine creatures with the bodies of men and heads of dogs. They are black like other Indians, we are told, and have teeth, nails, and tails like those of a dog, but only bigger. The lifestyle of the Dogheads is also a provocative mixture of human and animal, or nature and culture. They live in caves rather than houses, and do not work the land, but hunt their food. They can only cook food by broiling it in the sun, since they do not know how to light fires. They also raise cattle and goats and drink milk. The *Kunokephaloi* sleep outdoors, but on beds of dried leaves, and they wear skins of wild beasts as clothing. They have intercourse with their wives on all fours, like dogs, Ctesias tells us, and consider any other form of sexual relations to be shameful. The Dogheads are the longest-lived of any human race, living to be 160, or even 200 years old, and they are exceptionally just. They are not belligerent and harm no one. This surprising mix of qualities—people with the head, tails, and sexual mores of dogs, who are also very just and long-lived—cuts across normal ancient ethnographical categories. Faraway peoples, peoples who live at the edges of the earth, such as Ctesias' Indians, are generally of two very different kinds: they are either exceptionally noble, beautiful, and just, or else they are close to beasts in their diet, sexual practices, and lifestyle. Ugly, animal-like people who also possess moral beauty are unusual.¹⁰

The Dogheads do not just defy ordinary ethnographical categories: they straddle the border between animal and human, and

⁹ FG^h 688 F 45. 37. 40-3; F 45p 88y. For two very different approaches to (the historicity of) Ctesias' Dogheads, see Romm 1992, 78-80 and Karttunen 1989, 180-5.

¹⁰ See Romm 1992, 80-1; Lefant 1999, 206-13.

their language, too, deviates from the normal division between animal communication and human speech. The Kunocephaloi, according to Ctesias, have no verbal speech but bark like dogs and in this way comprehend one another (*φωνὴν δὲ διαλέγονται οὐδεμίαν ἀλλ' ὠρύονται ὥσπερ κύνες, καὶ οὕτω συνίσιν αὐτῶν τὴν φωνήν*).¹¹ Yet their communication skills go beyond mutually comprehensible barking. The Dogheads mingle with the Indians and understand the Indians' speech, even if they cannot respond in kind. They speak no language to the Indians, Ctesias explains, but bark like dogs and gesture with their hands and fingers, as do deaf people and mutes (*ἀλλὰ τῇ ὠρυγῇ καὶ ταῖς χερσὶ καὶ τοῖς δακτύλοις σημαίνουσιν ὥσπερ οἱ κωφοὶ καὶ ἀλαλοὶ*). We find here, then, two different levels of communication: barking is used as a means of communication within Doghead society, while in the wider Indian world, the Dogheads understand the speech of others and use gestures, in addition to barking, to express themselves. Their powers of comprehension are fuller than their powers of expression: the Dogheads are sufficiently rational to understand the full-scale language of the Indians, even if they have no ability to articulate words.¹² In this fashion, the Dogheads, though speechless, are integrated into Indian society as a whole. Indeed, they communicate well enough with their gestures and barks to be able to engage in barter with their Indian neighbours. They also pay a yearly tribute to the Indian king and receive gifts from him in return.

When describing the Dogheads, Ctesias seems to be playing with a variety of categories: these creatures are noble and savage, human and bestial, and their unusual barking, gesturing language is consistent with their overall hybrid nature. Later writers will have difficulties with the taxonomy of these ambiguous creatures. Are Ctesias' Kunocephaloi humans or beasts? Ctesias classifies them as human, while Aelian sees them as animals, precisely because they do not possess articulate, intelligible, human speech.¹³ The Dogheads

¹¹ *FGrH* 688 F 45. 37 (note that *αὐτῶν* is an emendation). In the course of this sentence, Ctesias (or perhaps his epitomator Photius) uses the word *φωνή* in two different ways, first as speech and then as sound. See *F* 45p α (= Pliny, *NH* 7. 23) *pro voce latratum edere* and *F* 45p γ (= Aelian, *NA* 4. 46) *καὶ φθέγγονται μὲν οὐδέν, ὠρύονται δέ, τῆς γὰρ μὴν Ἰνδῶν φωνῆς ἐπαύουσι*. See too Pelliccia 1995, 55–6 n. 80.

¹² See Pelliccia 1995, 104 on this distinction between comprehension and vocal ability and compare above, Sect. 1.4, on the similar position of Odysseus' men who are turned into non-speaking swine by Circe (*Od.* 10. 239–40).

¹³ Aelian, *NA* (4. 46): *μημίην δὲ αὐτῶν [sc. of the Dogheads] ἐν τοῖς ἀλόγοις ἐπισημαίνον, καὶ εἰκότως: ἐναρθρον γὰρ καὶ εὐσημον καὶ ἀνθρωπίνην φωνὴν οὐκ ἔχουσιν*. See

are a particularly illuminating instance of the way the linguistic skills of various beings can reflect their overall level of culture. These creatures—with their beds of leaves, clothing from animals skins, and food cooked by the sun—possess a bare minimum of civilization. They do not quite build houses, weave, or cook, but their lifestyle is more than a simple state of nature. Their clothing of animal skins hides their nudity, but is not as sophisticated as the woven clothing worn by others, they like to cook their food but cannot light a fire, and their language is more than natural animal communication, but less than full-fledged speech.¹⁴ Once again it is worth noting the particular link between language and diet: the Dogheads cannot articulate speech or cook their food with fire, but they do have a language of sorts and eat food cooked by the sun. Ctesias presents a picture of a society where civilization, including language, is still in the making. The rudimentary arts and techniques used by the Dogheads are a very basic version of the sophisticated arts developed by other peoples. Here, ethnography coincides with anthropological conjectures on the state of early man, for the Dogheads seem to represent life at an early, primitive stage before the development of full-scale technology. And so, the language of the Kunocephaloi, which is a midway station on the road to speech, teaches us something about Ctesias' views on the development of speech. His creatures are rational enough to comprehend actual language and to use unarticulated sounds and gestures to communicate. Actual speech, Ctesias seems to be saying, was preceded by thought, unarticulated sound, and gestures.

The Fisheaters are another instance of a primitive, uncivilized people who do not use speech, and they are described in Agatharchides' *On the Erythraean Sea*. Agatharchides, like Ctesias, was from Cnidus, and he composed his ethnographic work in the second half of the second century BCE. The composition did not survive, but Diodorus of Sicily and Photius provide extensive, parallel summaries of Agatharchides' account of the Fisheaters (*Ἰχθυοφάγοι*).¹⁵ The lifestyle of the Fisheaters is very simple. They

FGrH 688 F 45. 37 and *F* 45p (Photius and Pliny) and compare Aristotle, *Hist. An.* 2.8; Philostratus, *Vit. Apoll.* 6. 1. 2.

¹⁴ Compare the development of clothing—leaves and hides, plained and felted clothes, and finally clothing woven on the loom—outlined by Diogenes of Oenoe, *fr.* 12; see above, Sect. 4.5. Ctesias tells us, incidentally, that the Dogheads obtain finer clothes from their fellow Indians through barter (*FGrH* 688 F 45. 41–2).

¹⁵ See GGM 1. 129–41, *fr.* 31–49 = Photius cod. 250, 449a–451b; Diod. 3.19–

have neither cities, nor fields, nor the rudiments of technical arts. They wear no clothes and hold wives and children in common (fr. 31). They live, of course, on fish, which they catch with their bare hands, using thorns and rocks as well. They apparently do not know how to use fire, for they cook their fish in the sun (fr. 32 and 34). Agatharchides praises the Ichthyophagoi for their uncomplicated way of life, noting that they abstain from war, eschew navigation, and have no need of written laws. Their needs are minimal, they desire neither power nor wealth, and this, claims Agatharchides, makes their situation idyllic (fr. 49, only in Photius, not in Diodorus).

It is not clear how the Fisheaters' lack of articulate language contributes to this utopian picture, but Agatharchides stresses the speechlessness of at least some of the Fisheaters several times. When the Ichthyophagoi celebrate, we are told, they entertain one another with inarticulate songs. When they search en masse for drink, Agatharchides likens them to a herd of cattle, who roar rather than produce articulate speech.¹⁶ One group of Ichthyophagoi are said to be particularly 'insensitive' (*ἀπαθείς*). They show no interest in foreign visitors and display no emotion when they are insulted or attacked. They even view the killing of their women and children with equanimity, according to Agatharchides, showing neither pity nor anger. When such untoward events occur, the Fisheaters simply look on steadfastly and nod their heads at one another; they do not display any hint of normal human feelings. Agatharchides concludes from their behaviour that this group of Fisheaters do not possess a common language, but regulate everything concerned with their way of life by habit, nods, inarticulate sounds, and imitative gestures.¹⁷ Presumably Agatharchides thinks it unaccountable that

21. Burstein 1989, 37–8 notes that Diodorus is fuller, but Photius' wording is closer to that of Agatharchides. See too Jacob 1991, 133–46 for an excellent analysis of Agatharchides as ethnographer; he notes that modern scholars consider Agatharchides' account fairly reliable and accurate.

¹⁶ Inarticulate songs: fr. 37: *ταῖς ἀνάνθρωποις ὡδαῖς ἀλλήλους ψυχαγωγούντες* Diod. 3. 17. 1; cf. *γίνονται . . . πρὸς ὡδαῖς ἀνάνθρωποις* (Photius 450a10–11). Roaring cattle: *παρὰ λήσιος . . . ταῖς ἀγέλαις τῶν βοῶν, πάντων φωνῶν ἀφέντων οὐκ ἐναρπρον, ἀλλὰ ἤχον μόνον ἀποτελοῦσαν* (fr. 38: Diod. 3. 17. 3).

¹⁷ Photius fr. 41 (= 450b8–11) *ὅθεν (φησὶν ὁ συγγραφεὺς) ἐγὼγε νομίζω μὲν δὲ χαρακτῆρα εὐνοῦσιν ἔχειν αὐτοὺς, ἐθιμῶν δὲ καὶ νείματι, ἤτοι τε καὶ μιμητικῇ δηλώσει διακίειν πάντα τὰ πρὸς τὸν βίον. Compare Diod. 3. 18. 6: *διαλέκτῳ μὲν ἢ χρησθῆναι, μιμητικῇ δὲ δηλώσει διὰ τῶν χειρῶν διασπαρμαίνειν ἕκαστα τῶν πρὸς τὴν χρεῖαν ἀνηκότων* (they do not use language but signify everything having to do with their needs by imitative gestures of their hands).*

people capable of speech would simply nod when hurt in this way. If they are silent, it must be because they cannot articulate their feelings in words, and have only nods and gestures at their disposal. Elsewhere Agatharchides states that the Fisheaters have no moral sensibilities: while they can feel pleasure and pain, they pay no attention to honourable or disgraceful matters.¹⁸ We should also recall that they have no families and hold their women in common. People who have neither a common moral code, nor regulated social groupings have no real society.¹⁹ This would explain the Fisheaters' lack of speech: they are not socialized enough to evolve a full-fledged language. An undeveloped society and an underdeveloped language go hand in hand.²⁰

The pre-verbal language used by the Fisheaters is said to consist of nods, inarticulate noises, and descriptive gestures, and was used for communicating about everyday matters. As with Ctesias' Dogheads, this description of a primitive or near language is interesting for what it reveals about Greek ideas on the stages and forms of human communication which precede speech. We have seen in the previous chapter that many accounts of the beginnings of language point to articulated sound as the first step on the road to speech; here, greater emphasis is placed on gestures as part of pre-verbal communication. Agatharchides' remarks on the *content* of the Fisheaters' language are also noteworthy: these primitive people communicate about the everyday necessities of life and do not, as we have seen, express their feelings.

Agatharchides stresses the truth of his description of the 'insensitive' and speechless Fisheaters, citing his source, an explorer dispatched by Ptolemy III.²¹ Could this explorer actually have encountered such a society of non-speaking—and non-feeling—humans? Modern researchers point out that there are no known human societies without speech and it seems safe to conclude that

¹⁸ Fr. 31 = Diod. 3. 15. 2 and Photius cod. 250, 449a26–8. Again, it is not clear how this fits in with the utopian presentation of the Ichthyophagoi.

¹⁹ Note, however, the Fisheaters' peaceful and harmonious relations with an outside group of another species, the seals. Agatharchides describes their peaceful coexistence as virtually an unviolable treaty (fr. 42: *ὥστερ ἀπαρβαλάντων συναδείν* Photius 450b13; compare Diod. 3. 18. 7).

²⁰ See Burstein 1989, 79 n. 1 and compare Cole 1967, 82 n. 6 on common notions of morality as a basis for society. See too above, Ch. 4 *passim*, on the link between developing a language and developing a society.

²¹ Fr. 41 (Diod. 3. 18. 4). The explorer is an otherwise unknown Sinamesis; see Burstein 1989, 79 n. 3.

this was true in Agatharchides' time as well. (We nonetheless find arguments made for the existence of undeveloped, non-speaking humans as late as the end of the eighteenth century, with orang-outans, for instance, thought to be such savage humans.)²² Ptolemy's explorer may well have described what he *thought* he saw when observing a foreign and very exotic people. Perhaps the seemingly incomprehensible sounds which accompanied the Fish-eaters' gestures were real words in their language. In other words, the Ichthyophagoi may have been unintelligible to outside observers, but nonetheless spoken an actual language among themselves. Perhaps their nods when those around them were harmed were the equivalent of other peoples' terrible sobs and wails, but outside observers did not realize that these were emotional reactions.

Here it is worth looking for a moment at the accounts furnished by early European explorers of their linguistic encounters with the wholly unfamiliar native inhabitants of the New World.²³ When Columbus confronts a foreign tongue in the course of his voyages, he either does not acknowledge the language as altogether unknown, and imagines that he recognizes familiar words in Indian tongues, or else he denies that the strange form of speech is in fact a language. Thus, Columbus writes of his desire to take six Indians back with him to Spain 'so that they may learn to speak'.²⁴ To speak is to speak a European language; Indian forms of speech fall upon deaf European ears. Other early voyagers described the Indians whom they met as 'no more than parrots'.²⁵ Some explorers of the New

²² See Rousseau, *Discourse on Inequality*, Note x (Starobinski 1964, 208-14; Masters 1964, 203-13). The eccentric Scottish philosopher James Burnett, Lord Monboddo (1714-99) was a strong advocate of the argument that speech is not universal among humans. In his *Of the Origin and Progress of Language* (1773-92), he argued, in the wake of Rousseau, that orang-outans are not animals but humans. He also contended that there were herds of wild, speechless men living in the woods of Angola. Monboddo believed that speech did not develop naturally, but arose in the context of communal work, after society had been formed. See Stam 1976, 62-5; Thomas 1983, 130-2; Simone 1998, 208-9.

²³ See Todorov 1984; Greenblatt 1991, ch. 4; Pagden 1993, ch. 4.

²⁴ Modern translators, wittingly or unwittingly, changed this to 'that they may learn our language'. See Todorov 1984, 30 and compare Greenblatt 1991, 95, who notes more generally that Indians were both thought to be unformed, cultural blanks, 'as naked in culture as they are in body', and at the same time imagined as virtual doubles of the Europeans, fully conversant with their language and culture.

²⁵ See Greenblatt 1991, 99 and 181-2 n. 30. See too the further descriptions of the unintelligible language of 'primitive' peoples cited by Thomas 1983, 42 and 318.

World turned to non-verbal communication, when frustrated by a lack of common language with the Indians. Columbus bears witness to the difficulties involved in communicating by signs and gestures. He understands, for instance, that Indians who raise their hands to the sky and shout are welcoming him, when in fact they are threatening to kill him. His own attempt to convince Indians to approach him by having his men dance to the beat of a tambourine is similarly unsuccessful.²⁶ Other peoples' gestures and expressions of emotion are not transparent or self-evident and we can sympathize, perhaps, with the puzzlement of sixteenth century Europeans when faced with a Brazilian ceremony of welcome by means of copious tears.²⁷

Perhaps, then, Agatharchides' source simply misread the Fish-eaters' ways of communicating, and did not understand their language and gestures for what they were. Pliny, when describing numerous, exotic tribes of India, notes that there are so many different national languages, dialects, and varieties of speech that a foreigner seems scarcely human to someone of another race. We can compare Leibniz's reaction in 1691 to the exotic languages of America and remote parts of Asia and Africa which 'seem to be so different among themselves and from ours that one would say that it is another race of animals'.²⁸ Pliny then goes on to tell of a tribe, the Choromandi, who are forest dwellers with shaggy bodies, grey eyes, and doglike teeth. They are without speech (*sine voce*), and shriek horribly, according to Pliny.²⁹ It is not, of course, only classical writers or early European explorers who considered speakers of an unfamiliar language to be without speech altogether, and in a wide variety of cultures, the word 'mute' is used to designate foreigners, down to this very day.³⁰

The Greeks, like so many others, found it difficult to recognize that other peoples had a legitimate, authentic language and culture of their own. In Sophocles' *Trachiniae* (1060), Heracles divides the

²⁶ See Todorov 1984, 30-3; Greenblatt 1991, 89-91.

²⁷ See Greenblatt 1991, 93 and 98-9.

²⁸ Pliny, *NH* 7. 1. 7. Aarsleff 1982, 99 n. 39 is the source of this quotation from Leibniz.

²⁹ See Pliny, *NH* 7. 2. 24 (= *FGH* 710 F 1, the sole fragment of Tauron, an otherwise unknown, apparently Hellenistic, author). Pliny goes on to tell of the Astommi tribe, described by Megasthenes, who have no mouths and presumably cannot speak (*NH* 7. 2. 25).

³⁰ See Werner 1983, 587 and see Greenblatt 1991, 90. See Todorov 1984, 76-7, who notes that the Aztecs interpret their own name as referring to their linguistic excellence, in opposition to other tribes.

world into Greece (Ἑλλάς) and an ἄγλωσσος or tongueless land, and ἄγλωσσος serves as a poetic synonym for βάρβαρος or barbarian. *Barbaroi* are, first and foremost, people who do not speak Greek, but gibberish. The word *barbaros* was, it seems, at first simply onomatopoeic, reflecting the bubbling unintelligibility of foreign speech to Greek ears. Only later, at the beginning of the fifth century BCE, did the word acquire the more negative connotations we now associate with the word barbarian.³¹ Incomprehensible barbarian languages were often likened to the sounds made by animals, especially birds, and this may suggest that in Greek eyes barbarian speech was less than a full-fledged language, and closer to animal communication.³² There were of course a whole range of languages spoken by the peoples who surrounded the Greeks and some Greeks recognized that not all foreign languages were identical. Plato, for instance, stresses that humans cannot simply be divided into two groups, Greeks and barbarians. There are countless barbarians who never mix with one another and who speak different languages, Plato states (ἀπείροις οὐσι καὶ ἀμείκτοις καὶ ἀσυμφώνοις πρὸς ἄλληλα *Politicus* 262c-d).

Speaking Savages

Ctesias' Dogheads and Agatharchides' Fisheaters demonstrate how exotic and unusual people are assigned particularly bizarre forms of language in Greek writings, and are not even thought to speak. There are other foreign peoples described by Greek authors who are less primitive and strange, and these peoples are said to possess a form of actual speech; nonetheless, there is a clear link between their level of civilization and the character of their speech. This interplay between language and culture is particularly apparent in the descriptions of barbarian languages found in Herodotus.³³ In Herodotus' ethnographic surveys, a people's language generally reflects their overall character and state of civilization. The peoples said by Herodotus to have a peculiar or unique language of their

³¹ For changing Greek attitudes to the 'barbarian', see Hall 1989, *passim*, and the extensive bibliography found there. See too Tuplin 1999, 54-7.

³² See e.g. Aes. *Ag.* 1050-1; Ar. *Frogs* 680-2, compare 93; *Birds* 199-200, compare 1681. See too Harrison 1998, text near n. 71 and the further references collected by Tuplin 1999, 50 with n. 14; he notes that barbarian speech is compared to the sound of a spluttering frying pan as well (Eubulus fr. 108 K.-A.)

³³ Harrison 1998 is an excellent study of Herodotus' conception of foreign languages.

own are generally singular in other ways as well.³⁴ Thus the Argippaioi (Ἀργιππαιοί) are a bald people, judicious, and non-violent, who live mainly on the fruit of a particular tree. While they are a Scythian tribe and wear Scythian clothing, they speak a language of their own (φωνὴν δὲ ἰδίην ἰέντες 4. 23. 2). The troglodyte (or cave-dwelling) Ethiopians who eat snakes, lizards, and other reptiles provide another instance of a unique tongue. Herodotus tells us that they use a language like no other and squeak like bats (γλώσσαν δὲ οὐδεμιῇ ἄλλῃ παρομοίην νενομίκασι, ἀλλὰ τετρίγασι κατὰ περ αἰ νυκτερίδες 4. 183. 4). Here we come closest to the concept of a near bestial language, returning to the stereotyped Greek analogy between barbarian tongues and animal sounds.³⁵ In a rare description of the *content* of a language, Herodotus also describes a tongue which is deficient—if not primitive—for it lacks the concept of personal names. The Atarantes, we are told, have a collective name, 'Atarantes', but individuals have no names of their own. They are the only people in the world, Herodotus states, whom he knows to be without names (4. 184).³⁶ We have encountered in the previous chapter several depictions of hypothetical early societies where men possess language, but nonetheless live as brutes, in uncivilized fashion (below, Sect. 3). Herodotus tells of such a contemporary primitive people, the Androphagoi or man-eaters (4. 106). These cannibals neither observe justice nor have a code of laws and they are the most savage of men. While the Androphagoi dress like the Scythians, they speak a unique language of their own.

The Argippaioi, Ethiopians, and, of course, the Androphagoi all have unusual diets and once again we see the close connection in Greek thought between language and diet. Not only in Greek thought: the English adventurer Sebastian Cabot put three captives from Newfoundland on exhibition in 1502. An early account compares their demeanour to that of brute beasts and describes them as

³⁴ Not every exotic tribe in Herodotus is assigned a language of any kind and the historian often does not touch upon the form of speech used by various peoples, but when he does assign singular peoples a language, it is unique.

³⁵ Compare Diod. 3. 8. 1-3 and see too Galen, *De Captivibus* c. 2 (94, 20-96, 3 Edlow), who contends that although neither Persian nor Ethiopian signify anything to Greek speakers, Persian is a superior language because of its sound. Cleopatra is said to have spoken the languages of the Troglodytes and the Ethiopians, along with several other tongues (Plut. *Ant.* 27. 3-4).

³⁶ Modern linguists tell us that there are in fact no languages without personal names. See Harrison 1998, text near n. 82, who suggests that Herodotus may be describing a taboo on the use of personal names.

'clad in beasts' skin, eating raw meat, and speaking an unintelligible language'.³⁷ This is remarkably close to Thucydides' description of the Eurytians 'who speak a dialect more unintelligible than any of their neighbours and are believed to eat raw meat'.³⁸ Returning to Herodotus, we find that he also points to the link between a people's overall way of life (*διαίτα*) and language. The Budini, Herodotus tells us, are pastoral nomads and eat lice, while the Geloni cultivate the soil, keep gardens, and eat grains. Neither their language nor their *diaita* is the same, he states (4. 109).

If strange, unique people need a unique language, peoples whom Herodotus describes as having merged or joined together somehow often merge their languages as well, supposedly speaking a mixture or blend of the two original languages. The Geloni, for instance, are Scythian dwellers who were originally Greeks. Herodotus claims that they speak a language partly Scythian, partly Greek (*καὶ γλώσση τὰ μὲν Σκυθικῇ, τὰ δὲ Ἑλληνικῇ χρέωνται* 4. 108. 2). So too the Ammonians are said to be descendants of both the Egyptians and the Ethiopians and to speak a language in-between the two (*καὶ φωνὴν μεταξύ ἀμφοτέρων νομίζοντες* 2. 42. 4). It is hard to know what such hybrid tongues, half-Greek and half-Scythian or partly Egyptian and partly Ethiopian are meant to be. Were there really such halfway languages with perhaps a commingled vocabulary and some sort of mixed syntax and morphology?³⁹ Here too, as with the unique languages of the bald and just Argippaioi, cannibalistic Androphagoi, and cave-dwelling Ethiopians, Herodotus is not so much describing actual languages, as depicting what the languages should be like, in view of the character and origins of their speakers.

Foreign languages in Herodotus, then, seem to be fashioned in accordance with those who speak them. The two most exotic languages—those of the squeaky Ethiopians and nameless Atarantes—perhaps hint at primitive forms of speech which are somehow less than full-fledged languages. Here it is worth comparing the conclusions Europeans thinkers of the seventeenth and eighteenth centuries drew about the earliest form of language from their study of

³⁷ See Leach 1982, 66 and Greenblatt 1991, 184 n. 55.

³⁸ Thuc. 3. 94. 5; see above, Sect. 2.3.

³⁹ See Lloyd 1976, 199–200 (ad 2. 42), who defends Herodotus' description of the Ammonian language and argues for the existence of a lingua franca made up of Cushitic Ethiopian, Egyptian, and Libyan dialects; see too Fehling 1989, 132. Compare also Xenophon's half-barbarians (*μεισθάρηδες* *Hellenica* 2. 1. 15: what language did they speak?). See too Asheri 1994, esp. 48–9; Harrison 1998, text near n. 84 and the further references there.

exotic and 'savage' forms of speech. Europeans thought the Amerindian languages extremely simple, with, for example, a smaller lexical stock and no abstract terms. At times these New World languages were romanticized—often by people with no real knowledge of them—and presented as rich, poetic tongues, able to express entire images in a single word.⁴⁰ European 'students' of Indian languages went so far as to develop 'a conjectural history of language, which goes from simple terms to complex ones, from metaphorical utterances to logical ones, from the unified speech-act to the decomposed language of the syllogism'.⁴¹ Herodotus' analysis of 'primitive' foreign languages is, unsurprisingly, far more rudimentary.

In Herodotus' *History*, we also find that there can be unbridgeable linguistic gaps between certain kinds of people. There is a tale (2. 32; see 4. 172) of adventurous young Nasmonians, members of a locust-eating, women-sharing Libyan tribe. These young men venture into unknown and uninhabited parts of the Libyan desert, where they encounter very small black men, said to be wizards. Neither of these two exotic peoples can understand the other's language. Here we can compare the account of the Carthaginian Hanno, who in his *Periplus* (c. 11) tells of a (presumably) Ethiopian tribe, who spoke a language unintelligible (*ἀσύνετα δ' ἐφθέγγοντο*) even to the Carthaginians' interpreters, the Lixitae. There are people so different, so 'other' as to be completely unintelligible to anyone else, including interpreters. In other instances, only a series of intermediaries and interpreters are able to overcome the linguistic barriers between various peoples. Herodotus tells us that the Scythians deal with their remote and near mythical neighbours by means of seven interpreters in seven languages (4. 24) and perhaps he is describing here a chain of seven interpreters, each translating from one language into the next.

3. GESTURES AND MUTE VOICES

Gestures

In one incident in Herodotus, linguistic difficulties are circumvented by means of gestures, which serve as a last resort when there is no common language. When Amazon women arrive unexpectedly

⁴⁰ See Pagden 1993, ch. 4; Greenblatt 1991, ch. 4; Lawson 1996, esp. 130–3. See too above, Sect. 3.3.

⁴¹ Pagden 1993, 134; see his discussion in 126–34.

on Scythian soil, the Scythian men do not know what to make of them (4. 111–17). They do not recognize the Amazons' language, clothing, race, or even gender, and at first the Scythians take the Amazons for men and do battle with them. Once the Scythian warriors realize that the Amazons are female, they break off all fighting and approach the women in stages, eventually indicating by sign language (τῇ δὲ χειρὶ ἔφραζε 4. 113. 2) their interest in sexual contact. Subsequently, after mating with the Scythians, the Amazons will set up house with them and learn their language, albeit imperfectly.⁴² Gestures also play a part in a lively scene in Xenophon's *Anabasis*, where local Armenians dressed in native clothes serve feasting Greeks, who are conducting a symposium of sorts. The Greeks wear hay wreaths, instead of the usual ivy or myrtle, and, we are told, use sign language to the Armenians as if to mutes (ὡς περ ἐνεοῖς) to indicate what should be done (4. 5. 33). In this slightly farcical situation, the Greeks are, of course, no less mute than the Armenians, for neither people speaks the other's language.⁴³

Here gestures overcome language barriers and allow speakers of different languages to communicate. In Aeschylus' *Agamemnon*, Clytemnestra presses the silent Cassandra to communicate by means of her foreign hand and use barbarian gestures, if she is incapable of Greek speech (σὺ δ' ἀντὶ φωνῆς φράζε καρβάνω χειρὶ 1061). Clytemnestra assumes that there is an international language of gesture, available to—and understood by—all. Gestures and signs are in fact far from self-evident or non-conventional, as we have just seen in the case of European travellers meeting up with inhabitants of the New World, but we find Clytemnestra's approach echoed elsewhere in the ancient world, most notably by Quintilian. Although the peoples of the earth speak a multitude of tongues, Quintilian states, they share in common the universal language (*omnium hominum communis sermo* 11. 3. 87) of gesture.⁴⁴ In his discussion of gestures, Quintilian pours forth a paean of praise to

⁴² Compare Herodotus' Carthaginians who barter goods—silently and without personal contact—with a race who live beyond the Pillars of Heracles. They do so by means of smoke signals and dumb show (4. 196). Rotolo 1972, esp. 410–14, and Rochette 1995, 11 have useful collections of ancient passages relating to the use of gestures, sign language, and non-verbal communication.

⁴³ Compare too Xenophon's Mossynoeci who are said to speak to themselves, laugh aloud in private, and dance (*Anab.* 5. 4. 34).

⁴⁴ Compare Cic. *De Orat.* 3. 223, where facial expressions and gestures—which express the emotions of the mind—are said to influence everyone, for everyone feels the same emotions.

hands. Hands, he states, virtually speak, expressing demands, promises, requests, and threats. Hands can indicate a wide range of emotions and refer to quantity, number, and time. They even take the place of adverbs and pronouns, by pointing to places and people.⁴⁵

This passage of Quintilian reflects a broader view of gestures as capable of expressing more than simple and immediate matters. In some ancient accounts, gestures are said to replace speech and serve virtually as a full-scale language. In a lively tale found in Lucian, gestures and movements suffice to replace words: a dancer in Nero's court is so good at conveying silently the words of songs that Nero's guest asks if he may take the dancer back home, in order to use him as an interpreter for his polyglot subjects.⁴⁶ In this story—as opposed to the passages in Herodotus, Xenophon, and Aeschylus—the movements of the dancer go beyond an immediate situation and are said to convey actual words, rather than to mime needs and desires.

In two ancient tales, people capable of speech turn to gestures in order to express themselves freely and without fear. Aelian has a fascinating story of a tyrant who forbade his subjects to speak to one another for fear that they would conspire against him. They nonetheless manage to express themselves through nods, gestures, and facial expressions, and the tyrant then prohibits the use of these movements as well. When his downtrodden subjects resort to tears to express their feelings, he also tries to ban their tears, but this leads to his death at their hands. In a similar story, the tyrants Gelon and Hieron are said to have forced their Syracusan subjects to keep silent. The Syracusans then learned to express themselves with their feet and hands and eyes, leading to the invention of dance. When the Syracusans were freed and instituted a democracy, Corax began to teach them the rhetorical use of words.⁴⁷

Elsewhere we hear of philosophical pantomimes. Athenaeus (1. 20b–c) tells us that a dancing philosopher nicknamed Memphis

⁴⁵ Quint. 11. 3. 85–7. While Quintilian speaks of a universal language of gestures, he nonetheless describes a series of conventional gestures and distinguishes between e.g. Greek and Roman gestures in his discussion in 11. 3; see further Graf 1991.

⁴⁶ Lucian, *Salt.* 64; compare *Jup. Trag.* 13, where Hermes states that he has to resort to gestures because he is not a polyglot and does not speak the language of the Scythians, Persians, Thracians, and Celts. On the ancient view of dance as an autonomous language, capable of conveying words, see further Montiglio 1999.

⁴⁷ Aelian, *VH* 14. 22; Rabe 1931, 24–6; see too 269–70.

silently explicated Pythagoras' philosophy, in a clearer fashion than those who taught with words. Gestures, in this tale, are superior to words. Here we have come a long way from the concept of gestures as a primitive pre-verbal form of speech. The children in Psammetichus' experiment (above, Sect. 3.2), the primeval pre-linguistic humans found in the scenarios of writers such as Lucretius and Vitruvius (above, Sect. 4.5), and the Dogheads and Fisheaters (above, Sect. 2) all use manual signs to communicate because they have no words at their disposal, but Athenaeus' dancing philosopher finds such gestures more lucid than words. Clearly his is a *language* of gestures, a full-fledged, sophisticated form of communication.

Deaf Mutes

Gestures are also used by those who cannot speak, deaf mutes. We know very little about deaf mutes and the use of sign language in the ancient world. We have already seen that Xenophon's miming Greeks compare their Armenian hosts to mutes. In Plato's *Cratylus* (422e–423a) Socrates refers to the way mute people use their hands, head, and entire body to communicate with others. Such signs are mimetic, according to Socrates, and he considers what the signs for something light in weight and up above, something downward and heavy, and a galloping horse must be like. While Socrates does not discuss here the overall linguistic capabilities of those who are mute and use such signs, he does imagine them trying to describe both abstract qualities and a moving creature.⁴⁸ In the dialogue *De Magistro* (3. 5), Augustine points out the wide range of the gestural communication of deaf mutes and actors, while at the same time noting their limitations. Augustine states that people carry on conversations with the deaf by means of gesture. The deaf themselves use gestures to talk and answer questions, to teach and make known to each other all their wishes—or, he adds, at least most of them. Augustine then points out that actors can tell entire stories silently, without using a single word. When pressed by his interlocutor Adeodatus, Augustine concedes that such an actor would be unable to convey the meaning of the preposition *ex* by gesture.

Quintilian tells us that gestures and nods take the place of speech for the mute (*et in mutis pro sermone sunt* 11. 3. 66) and he may be

⁴⁸ See Pl. *Theaet.* 206d (where deaf and mute people are said to be unable to indicate what they think about things).

allotting these motions virtually the status of a language, in view of his appreciation of 'speaking' hands. Philo (*De Confusione Linguarum* 11) notes that people who have had their tongues cut out can express whatever they like (ἀ ἀν' ἐλθέσων ὑποσημαίνουσι), no less successfully than those who use words (οὐχ ἥττον τῆς διὰ λόγων προφορᾶς). They do so by means of gestures, nods, glances, and other movements, and here too gestures are said to be as expressive as words. Did these ancient thinkers really believe that a gestural language was as good as speech? Perhaps. It is worth recalling again that modern researchers recognized the flexibility and range of sign languages and their status as fully developed languages only a few decades ago.⁴⁹

Enlightenment thinkers of the seventeenth and eighteenth centuries became quite interested in deaf mutes and the gestures they used as part of their interest in the origin of language. Diderot in his *Lettre sur l'éducation des sourds et muets* (1751) and James Burnett, Lord Monboddo in his *Of the Origin and Progress of Language* (1773–92) thought there were parallels among the means of communication used by deaf mutes, savages, children, and the first human beings. The deaf were thought to recreate the way early humans developed a first language, a language of gestures. Other Enlightenment figures were interested in developing a new language, a universal language of gestures, which could be taught to the deaf.⁵⁰ Greek and Roman thinkers did not study the deaf in this fashion and indeed some ancient writers did not assign mute human beings full linguistic capacities. At times we hear of the sounds uttered by the deaf, rather than their gestures, and here emphasis is placed on the fact that deaf-mutes are incapable of producing the sounds of speech. In a medical tract attributed to Hippocrates, we are told that those who are deaf from birth can only produce one sound.⁵¹ Ammonius, commenting on Aristotle's *De Interpretatione* in the fifth century CE, notes that people who are deaf from birth make certain inarticulate sounds, but do not use names and verbs. Ammonius also discusses the distinction between vocal sounds

⁴⁹ See above, n. 2. William Stokoe—the key figure involved in recognizing sign languages as autonomous, full-fledged languages—began his research into sign languages in the late 1950s; see the valuable discussion of Rée 1999, 310–30.

⁵⁰ See Rée 1999, esp. chs. 12–13; Simone 1998, 208 and 227 nn. 125–6; Eco 1995, 172–3; Knowlson 1965 (= 1975, 211–23).

⁵¹ Pseudo-Hippocrates, *περί σαρκῶν* 18 (xiii. 200 Joly); see Ax 1984, 116–18; and see above, Ch. 4, n. 88.

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⁴⁸ See Pl. *Theaet.* 206d (where deaf and mute people are said to be unable to indicate what they think about things).

allotting these motions virtually the status of a language, in view of his appreciation of 'speaking' hands. Philo (*De Confusione Linguarum* 11) notes that people who have had their tongues cut out can express whatever they like (ἀν' θελήσων υποσημαίνουσι), no less successfully than those who use words (οὐχ ἥττον τῆς διὰ λόγων προφορᾶς). They do so by means of gestures, nods, glances, and other movements, and here too gestures are said to be as expressive as words. Did these ancient thinkers really believe that a gestural language was as good as speech? Perhaps. It is worth recalling again that modern researchers recognized the flexibility and range of sign languages and their status as fully developed languages only a few decades ago.⁴⁹

Enlightenment thinkers of the seventeenth and eighteenth centuries became quite interested in deaf mutes and the gestures they used as part of their interest in the origin of language. Diderot in his *Lettre sur l'éducation des sourds et muets* (1751) and James Burnett, Lord Monboddo in his *Of the Origin and Progress of Language* (1773–92) thought there were parallels among the means of communication used by deaf mutes, savages, children, and the first human beings. The deaf were thought to recreate the way early humans developed a first language, a language of gestures. Other Enlightenment figures were interested in developing a new language, a universal language of gestures, which could be taught to the deaf.⁵⁰ Greek and Roman thinkers did not study the deaf in this fashion and indeed some ancient writers did not assign mute human beings full linguistic capacities. At times we hear of the sounds uttered by the deaf, rather than their gestures, and here emphasis is placed on the fact that deaf-mutes are incapable of producing the sounds of speech. In a medical tract attributed to Hippocrates, we are told that those who are deaf from birth can only produce one sound.⁵¹ Ammonius, commenting on Aristotle's *De Interpretatione* in the fifth century CE, notes that people who are deaf from birth make certain inarticulate sounds, but do not use names and verbs. Ammonius also discusses the distinction between vocal sounds

⁴⁹ See above, n. 2. William Stokoe—the key figure involved in recognizing sign languages as autonomous, full-fledged languages—began his research into sign languages in the late 1950s; see the valuable discussion of Rée 1999, 310–22.

⁵⁰ See Rée 1999, esp. chs. 12–13; Simone 1998, 208 and 227 nn. 125–6; Eco 1995, 172–3; Knowlson 1965 (= 1975, 211–23).

⁵¹ Pseudo-Hippocrates, *περί σαρκῶν* 18 (xiii. 200 Joly); see Ax 1984, 116–28; and see above, Ch. 4, n. 88.

which are significant by nature and those sounds which are significant by convention. Naturally significant sounds are the barking of dogs, the sounds of people affected by emotion—groaning, guffawing, etc.—and the inarticulate sounds of children and people who are deaf from birth.⁵² Here, Ammonius links together animals, emotional humans, deaf mutes, and children and states that the sounds they make signify no thought. It seems safe to say that he does not allot any of these groups a full-fledged language.

This brings us to the philosophical problem of what makes the deaf human and distinguishable from animals, when they lack one of the defining characteristics of humans, articulate speech. Porphyry will maintain that it is absurd to decide whether a creature possesses reason or not according to whether its speech is intelligible, or it remains silent or not. This is tantamount to saying that the gods lack *logos* because they do not speak, argues Porphyry.⁵³ Yet for Greek medical writers, at least, loss of voice is linked to loss of intelligence and loss of life. Often the loss of voice or speech indicate a terminal illness in Hippocratic writings.⁵⁴ Voice is the breath of human life, as a Swiss doctor of the early eighteenth century put it,⁵⁵ and for the Hippocratics loss of voice is perceived as loss of life.

Gaining Speech: Croesus' Son and Aesop

We can learn something of the status of the deaf in Greece from the story of Croesus' son. We have already encountered this deaf mute son, who breaks into speech for the first time in order to save his father's life (above, Sect. 3.2). Croesus has, in fact, two sons: the successful and persuasive Atys, whose eloquence and powers of persuasion lead him to an untimely death, and this unnamed deaf son, who rescues his father. The power of speech is critical for both the Lydian princes: Atys' skill in speaking—his ability to persuade Croesus to allow him to join a hunt—costs him his life, while his mute brother saves their father's life when he utters words for the first time.⁵⁶ Croesus has an ambivalent attitude towards his deaf first son. He has done everything he could for his disabled child (70

πάν ἐς αὐτὸν ἐπεποιήκει 1. 85 1), even turning to the Delphic oracle for advice, but he nonetheless considers him of no account (see τὸν . . . ἕτερον . . . οὐκ εἶναι μοι λογίζομαι 1. 38. 2). Herodotus too first describes the son as destroyed or useless because of his muteness (διέφθαρτο, ἦν γὰρ δὴ κωφός 1. 34. 2), but then concedes that this son is otherwise a decent sort (τὰ μὲν ἄλλα ἐπιεικής, ἀφωκός δέ 1. 85. 1), just before telling of how he rescued his father by speaking. It seems that this second son changes from worthless to worthy, from *infans* to human, precisely when he breaks into speech for the first time. Henceforth Croesus' unnamed mute son is able to speak: one imagines that if he had spoken from the start, he would have been given a name as well.

Aesop is another, rather different figure who gains the power of speech. According to the *Vita Aesopi*, this ugly Phrygian slave begins life with the capacity to hear, but is mute. Even when he is unable to speak, Aesop is quite capable and manages by dumb show to prove his innocence when accused of stealing figs (1–3).⁵⁷ Aesop is granted speech by the goddess Isis, as a reward for his kindness and piety towards her priestess (4–7). When Isis bestows a voice upon the sleeping Aesop, she is accompanied by the Muses. Asked by Isis to endow his voice with excellent speech, the Muses grant to Aesop the invention of stories (λόγων εὔρεμα 7)⁵⁸ and the weaving and construction of Greek tales. The scene in which Aesop discovers that he can speak is both charming and illuminating. He wakes from a nap and names out loud the objects which surround him—a wallet, sheepskin, sheep, etc.—and is then surprised to discover that he can actually speak (8). Aesop's use of speech begins with the naming of names, so that once again we encounter the assumption that the acquisition of language is essentially the acquisition of names. Aesop will go on to do wonders with his linguistic capabilities: he becomes eloquent and artful, and knows how to interpret riddling bits of writing as well. He also gives voice, in a sense, to animals, by means of his fables.

⁵² Ammonius, *In Arist. de Int.* 23, 2–9; 30, 25–31, 2 Busse.

⁵³ Porphy. *De Abst.* 3. 5. 4. Compare Sext. Emp. *PH* 1. 73: supposing that a man were mute, no one would call him irrational.

⁵⁴ See Montiglio 2000, 228–33 and the Hippocratic case histories cited there.

⁵⁵ The doctor is Johann Conrad Amman, who specialized in vocal disorders—see Rée 1999, 62–4.

⁵⁶ For an interesting analysis of Croesus' two sons, see Sebeok and Brady 1979.

⁵⁷ The references are to sections of the G recension of the *Vita*; see Perry 1952, 35–6. According to the W recension, Aesop is not mute, but slow of speech and with a booming voice (βραδύλωστος καὶ βομβόφωνος 1).

⁵⁸ Or perhaps we should understand 'the discovery of words'. See further Dillery 1999, esp. 269 and 275, who stresses the important role played by Isis, the Muses, and the invention of language in Aesop's *Vita*.

Losing Speech: Cratylus

Both Croesus' son and Aesop go from silence to speech, and in both instances there is something supernatural about their acquisition of spoken language. The philosopher Cratylus moves precisely in the other direction, from speech to silence, and he does so of his own volition, deliberately choosing to become mute. Cratylus, it seems, relinquishes speech out of despair. Aristotle tells us that in the end (i.e. at the end of his days—see immediately below) Cratylus thought that there was no need to speak, but simply moved his finger.⁵⁹ Aristotle mentions Cratylus' renunciation of speech when telling of his extreme version of the Heraclitean doctrine of flux. Cratylus does not believe that one can step into the same river once, let alone twice, and he apparently finds words no more stable or reliable. We have already encountered a rather different Cratylus in Plato's dialogue of that name. Plato's Cratylus believes in fixed, naturally correct names. Indeed language, according to Cratylus of the *Cratylus*, can teach us about the essences of things (above, Sect. 2.1). The difference between Plato's Cratylus and Aristotle's figure is probably best explained by a change which took place in Cratylus himself: Plato, it seems, describes the younger Cratylus, while Aristotle tells of an older, disheartened man. Cratylus, apparently, has gone from an extreme belief in the power of names to an utter disillusionment with words.⁶⁰

The speaking Cratylus is described as someone who uses few words: he is knowledgeable and brief (*ἐπιστημονικός . . . καὶ βραχυλογώτατος*), notes Proclus in his commentary on the *Cratylus*.⁶¹ Indeed, Cratylus is silent for much of Plato's dialogue. Elsewhere, Cratylus is said to hiss and wave his hands about. Aristotle provides this description of a hissing, gesticulating Cratylus and he attributes it to Aeschines the Socratic. The context in Aristotle is that of speakers who accompany their words with

⁵⁹ Κρατύλος . . . ὅς τὸ τελευταῖον οὐθὲν ᾤετο δεῖν λέγειν, ἀλλὰ τὸν δάκτυλον ἐκίνει μόνον. Arist. *Metaphys.* 1010^a12–13. See Mouraviev 1999, 23–55 for a very full collection of testimonia relating to Cratylus.

⁶⁰ See Allan 1954; Cassin 1987; Baxter 1992, 25–30. Cratylus is reminiscent of Thamyris, the mythical Thracian poet who is struck dumb for claiming to sing better than the Muses. The Muses take away Thamyris' wondrous voice and make him forget how to play the cithara (*Il.* 2. 594–600). Both Cratylus and Thamyris are reduced to silence precisely because of their great confidence in their linguistic powers.

⁶¹ Proclus *In Cratylum* 14.

emotional gestures, so that we can assume that Cratylus made these sounds and movements while speaking, rather than as a substitute for words.⁶² When Cratylus no longer speaks, he also restricts the expressiveness of his gestures. He moves just one finger, perhaps doing no more than pointing at objects. A moving finger is far removed from a full-fledged language of gestures, and it seems that Cratylus not only dispenses with articulate words, but also restricts himself to a bare minimum of gestural, non-verbal communication. Thus Cratylus is quite different from another silent philosopher, Secundus. Secundus, the perhaps fictional hero of an anonymous work of wisdom literature, dated to the second century CE, also chooses to refrain from all speech, but he communicates at length and in detail, by means of writing.⁶³ The silent, despairing Cratylus who willingly relinquishes spoken language is a singular instance of a civilized and sophisticated—perhaps too sophisticated—person who possesses the power of speech, but nonetheless chooses not to use it. All the other non-speaking humans we have encountered so far are silent either because they are unable to speak or be understood, or because they can express themselves more than satisfactorily by means of gestures. Cratylus chooses to restrict himself to a very limited level of communication.

Weaving and the Language of Women

Philomela is a mythological figure who does not speak. She did not choose to dispense with speech, but was deprived of language by force. Her brother-in-law Tereus raped her and then tore out her tongue. Philomela nonetheless manages to communicate with her sister Procne, Tereus' wife, through the 'voice of the shuttle' (*ἡ τῆς κερκίδος φωνή*), as Aristotle describes it, for she weaves an account of her experience.⁶⁴ The two sisters then take terrible vengeance upon Tereus, murdering his child and serving him up as food. All three—Tereus, Procne, and Philomela—end up losing their human voices, for they are transformed into birds. Commentators point out that it is not by chance that the two sisters are Athenians, while the brutal

⁶² ὡς περὶ Κρατύλου Αἰσχίνης ὅτι διασίζων καὶ τοῖν χερσὶν διασίζων (Arist. *Rhet.* 1417^b1–2). See, however, Mouraviev 1999, 27 (ad T50), who suggests emending *διασίζων* to *διὰ σιγῶν* i.e. silently. This would mean that the mute Cratylus gesticulated with both hands; see too Cassin 1987, 142–3.

⁶³ See Perry 1964, 70–91.

⁶⁴ Arist. *Poet.* 1454^a36–7: he is referring to Sophocles' lost tragedy *Tereus* (fr. 595 Radt). For a comprehensive list of ancient sources on Philomela see Frazer 1901, 98–100 n. 2 (ad Apollod. *Bibl.* 3. 14. 8); see too Forbes Irving 1990, 99–107, 243–9.

and unsophisticated Tereus is a Thracian: Philomela's ability to speak through inanimate matter reflects her superior level of civilization. Tereus may have extinguished Philomela's Greek voice when he cut out her tongue,⁶⁵ but he seems unaware that loss of speech need not mean the loss of language or the ability to communicate by other means.

It is likely that already in Sophocles' lost tragedy *Tereus*, Philomela weaves words or writing on her tapestry, rather than a picture, which would mean that her *textum* is, in fact, a text.⁶⁶ Tereus, who belongs to a less civilized society is incapable of deciphering such writing. (A woven picture, on the other hand, would be more readily understood by the Thracian.) Philomela retains her human language and technical skills, despite Tereus' attempt to dehumanize her through isolation, rape, and the cutting out of her tongue, and she uses a medium of communication even more sophisticated than speech, writing. The barbaric and barbarian Tereus is no match for the literate Athenian woman. Subsequently he will be no match for the sisters' savagery either, and in the end, Philomela, who is transformed into a swallow, will be incapable of either writing or producing intelligible speech.⁶⁷ Philomela's tale demonstrates how silent, inarticulate material can speak in the hands of a cultured human being, and ancient writers stress this point. Nonnus notes that the woven cloth speaks for mute Philomela, while Achilles Tatius declares that Philomela's art provides her with a silent voice: her weaving hand mimics language (*μμεῖται τὴν γλῶτταν ἢ χεῖρ*).⁶⁸ In Ovid, Philomela both weaves her story and uses gestures for further communication, asking a maid to convey the woven cloth to Procne.⁶⁹ Io, incidentally, is another figure in Ovid's *Metamorphoses* who manages to retain her communication skills, even when she is

⁶⁵ See too *Anthologia Palatina* 9. 451, line 4.

⁶⁶ See Dobrov 1993, 204–5, 213–14 and compare e.g. Apollod. *Bibl.* 3. 14. 8 *ὡφίησα ἐν πέπλῳ γράμματα*.

⁶⁷ Swallows were often associated with unintelligible barbarian chatter in Greek writings; see e.g. Aes. *Ag.* 1050–1 and Dobrov 1993, 222–3 with n. 74. Interestingly, in earlier Greek sources Procne becomes a nightingale, while Philomela is transformed into a swallow, but in later Roman accounts it is the tongueless Philomela who is turned into the songbird; see Forbes Irving 1990, 249 and the references cited there.

⁶⁸ Nonnus, *Dionys.* 4. 321; Achilles Tatius 5. 5. 4–5; see Bergren 1983, 72. Montiglio 1999, 260–70 compares the description of weaving as a silent language in Achilles Tatius 5. 4. 4–5 to parallel descriptions of dance.

⁶⁹ Ovid, *Met.* 6. 576–9. See too *Met.* 6. 609, where Philomela's hand is said to act for her voice, *pro voce manus fuit*.

brutalized and loses her human voice. After Io has been raped and then transformed into a cow, she nonetheless manages to reveal her identity to her father Inachus, by tracing her name in the dust with a hoof, using letters instead of speech (*littera pro verbis*).⁷⁰ Writing allows these women who have lost the power of speech nonetheless to retain their human voice and identity: they are silent, but not mute, thanks to alternative modes of communication.

It is significant that Philomela *weaves* her story. Weaving was the quintessential activity of females in the ancient world: goddesses, aristocratic women, and slave girls all worked at the loom. As the form of work most identified with women, weaving was often invested with what were thought to be peculiarly female powers—of communication, of intelligence, of deceit, or even of death—and all of these elements are found in Philomela's tale.⁷¹ In most versions of her story, Philomela is said to have woven letters, rather than a picture, but weaving could be used for the creation of images as well. Homer's Helen weaves on her loom the many contests of the Trojan War, as it is being fought around her, and Homer is clearly referring to a picture of sorts. Helen weaves a story, both literally and figuratively.⁷² Even plain pieces of woven material carried the signature of the women who wove them: Penelope, Arete, Electra, and Creusa all recognize their own handiwork, sometimes many years after they have woven it.⁷³ An inanimate textile can tell a tale or at the very least record the identity of the woolworker, and this form of communication is virtually restricted to women.⁷⁴ Most weaving women can speak as well as work wool, and skilful weavers often possess wise thoughts and crafty words. Indeed, the goddess Athena is said to grant to some women wise or subtle thoughts along with dexterity in woolworking. One of the recipients of Athena's gifts, Penelope, is exceptionally proficient in weaving cloth, wiles, and words. Penelope fends off her suitors both by means of persuasive

⁷⁰ Ovid, *Met.* 1. 611–747; see esp. 1. 649. De Luce 1993, in an interesting study of the motif of the *power* of speech, i.e. the relation between humanity and articulacy, in the *Met.*, discusses both Io and Philomela.

⁷¹ See e.g. Buxton 1994, 122–8 and Blundell 1998, 65–72.

⁷² *Il.* 3. 125–8. Compare too the picture of the gigantomachy woven into Athena's peplos by the young girls of Athens (Pl. *Euthyph.* 6b–c) and see Sched and Svenhede 1996, ch. 1.

⁷³ *Od.* 7. 234–5; 19. 218 and 225–6; Aes. *Choe.* 231–8; Eur. *Ion* 1417–85.

⁷⁴ See Bergren 1983 for an illuminating discussion of the links between female language and weaving in Greek thought. She terms weaving the 'sign-making activity of women *par excellence*' (71).

speech and the shroud which she weaves and then unravels.⁷⁵ The goddesses Calypso and Circe, described as dread goddesses endowed with speech, sing as they weave at their looms. They are deceitful, powerful, and seductive figures who prophesy as well.⁷⁶ We have already encountered the cunning and duplicitous words which the gods give to Hesiod's Pandora, the very first of the race of women (above, Sect. 2.3). It is worth remembering that Pandora is also taught the art of intricate weaving (πολυδαίδαλον ἰστόν ὑφαίνειν *Erga* 64) by Athena. Pandora's hand is no less proficient than her tongue in creating complicated designs full of artifice.

Weaving, then, is often linked to female communication, cunning, and deception, but the figurative interpretation of weaving is not restricted solely to women's activities. In Homer, males weave as well, but metaphorically: gods and heroes weave clever tricks, speech, and counsels.⁷⁷ After Homer, weaving will serve as a metaphor for poetry and song-making as well, and perhaps Calypso and Circe, who sing as they weave, influenced the early lyric poets when they compared their songs to fabric.⁷⁸ Most significantly of all, weaving is also used to describe the process of building up or constructing language.⁷⁹ In the *Politicus* (277d–278b), Plato speaks of the interweaving (συμπλοκή) of letters into syllables: he describes how young children are taught to recognize the vowels and consonants which are interlaced to form syllables and words. This is weaving on a phonological level; much of Plato's dialogue is occupied with the metaphor of political weaving. In the *Sophist* (262a–e), weaving is mentioned in relation to syntax.⁸⁰ To form a significant sentence or *logos* one cannot simply string together a series of nouns (νόματα) or a series of verbs (ρήματα), argues the Eleatic Stranger. Verbs and nouns must be blended or woven together into a harmonious union. Here we encounter a view of language as something more complex than a concatenation of names.⁸¹

⁷⁵ *Od.* 2. 88–122; see 7. 108–11.

⁷⁶ δεινὴ θεὸς αὐδήσσαι: *Od.* 10. 136; 11. 8; 12. 150; 12. 449; see above, Sect. 2.3. Weave at their looms: *Od.* 5. 61–2; 10. 220–2. Deceitful (δολέσσαι): 7. 245; 9. 32. See further Nagler 1996, esp. on their prophetic powers.

⁷⁷ See e.g. μύθους καὶ μῦθεα . . . ὑφαίνων *Il.* 3. 212; δόλους καὶ μῆτιν ὑφαίνων *Od.* 9. 422.

⁷⁸ See Snyder 1981 and compare Scheid and Svenbro 1996, 111–21.

⁷⁹ Interestingly, Hermes, who, as we have seen, is often credited with the invention of language, is said to have invented weaving as well—see Tertullian, *De Pallio* 3 (= *FrGrH* 659 F9b) and Cole 1967, 20 and 38–9.

⁸⁰ See 100 Pl. *Soph.* 259c; *Theat.* 201d–202c.

⁸¹ See Scheid and Svenbro 1996, 122–4; Denyer 1991, 146–64. It is worth noting

4. SPEAKING ANIMALS

Women and Slaves

Weaving women are thought to be particularly proficient at communicating, but elsewhere women's linguistic abilities are compared to those of animals.⁸² In Xenophon's *Oeconomicus*, Ischomachus speaks of his young wife's ability to use words. Before their marriage, he notes, his wife had been carefully supervised so that she would see, hear, and speak as little as possible (7. 5; see 3. 12–13). Now, however, she has been sufficiently tamed and domesticated by him to carry on a conversation, Ischomachus states, using words associated with the domestication of animals (ἐπει ἥδη μοι χειροθήης ἦν καὶ ἐτετιθάσεντο ὥστε διαλέγεσθαι 7. 10). Critobulus' wife is another woman mentioned in the *Oeconomicus*, and her husband barely talks with her. She was married as a very young child, who had seen and heard as little as possible (3. 12–13). Here we see that women are thought incapable of cultured discourse because they are not considered fully civilized human beings, but are more akin to children or even untamed animals.⁸³ These women are not fully proficient in ordinary speech, but their linguistic deficiency is partial and cultural, and can be remedied by their husbands' teaching.⁸⁴

Slaves are perhaps comparable to women in their linguistic status. Aristotle speaks of slaves as participating sufficiently in *logos* so as to understand it, but not to possess it (κοινωνῶν λόγου τοσοῦτον ὅσον αἰσθάνεσθαι ἀλλὰ μὴ ἔχειν *Pol.* 1254^b22–3). While Aristotle is referring here to slaves' powers of reasoning rather than their actual speech, *logos* does encompass both meanings, intelligible speech and rational thought.⁸⁵ Slaves are outside the community of rational discourse, for a variety of reasons—their birth, status, and that a web, which is a complex of threads, interlaced by warp and woof, can convey a tale in a manner that moving a finger, as Cratylus does, cannot.

⁸² This is not the place for a full-fledged discussion of the characterization of women's speech in Greek literature. Lardinois and McClure 2001 is a useful recent collection on the topic with a full bibliography.

⁸³ Hippolytus in Euripides' play of that name would like to reduce women to the speechlessness of animals. He suggests that women should be made to live with dumb biting beasts so that they will neither be addressed nor have an audience (*Eur. Hipp.* 645–8). For the assimilation of infant speech to that of animals, see above, Sect. 3.2.

⁸⁴ See Pomeroy 1994, 272–3 (ad *Or.* 7. 10).
⁸⁵ See Schültrumpf 1991, 213 (ad *Pol.* 1253^a7 ff.), who notes that at times eloquence rather than actual speech is used as a criterion to distinguish humans from animals: slaves do not pass this test.

command of language. Many of the slaves in the Greek world were of barbarian origin and did not speak proper Greek.⁸⁶ Perhaps that is why their Greek masters felt free to dominate them linguistically, as well as physically, changing their names at will. Slave owners commonly bestowed new names upon their slaves, controlling their identities as well as their bodies. Hermogenes of the *Cratylus* (384d) will point to this practice when defending his thesis that names are conventional, while the later philosopher Diodorus Cronus is said to have named his slave with the connective 'But then' (*Ἀλλὰ μὲν*), to underline this point.⁸⁷

Diodorus' slave is used here as an animate tool to demonstrate a point. To name is to label and to appropriate for one's own and while this process is natural and crucial for establishing the social identity of children (above, Sect. 1.2), the renaming of slaves means stripping them of their real identity and independent place in society. Mastery of language and mastery of persons go hand in hand here. While women such as the wives of Ischomachus and Critobulus may gradually attain to full-fledged linguistic capabilities, slaves are deprived of their names and native language and consequently become diminished as human beings.

Parrots and Corocottas

If the language of women and slaves is assimilated at times to that of animals, the reverse process is also true: there are living creatures who seem to possess human speech. Two outstanding instances of speaking creatures are parrots and corocottas. Ctesias was the first writer to acquaint the Greek world with parrots. In his *Indica*, he describes the size of these birds, their colourful plumage, and, of course, their ability to speak.⁸⁸ Parrots have a human tongue and voice (*γλώσσαν ἀνθρωπίνην ἔχει καὶ φωνήν*), Ctesias states, and can speak Indian like a human being, or Greek if they're taught Greek.⁸⁹ We do not have Ctesias' original description of parrots and their lin-

⁸⁶ See e.g. Pl. *Lys.* 223a-b and Ar. *Thesm.* 1001-7 for the broken Greek of slaves.

⁸⁷ Ammonius, *In Arist. de Int.* 38, 17 ff. (Busse) and Simplicius, *Cat.* 27, 18-21; he is also said to have named two further slaves *Mén*, and *Δέ*, and his daughter 'Theognis'. See Sedley 1973, 63, who suggests that Diodorus produced the slaves as a kind of walking argument against the contention that language was natural. Baxter 1992, 19 notes that Hermogenes' strong version of conventionalism entails treating language literally as one's slave, one's personal property to be dealt with as one pleases.

⁸⁸ See Bigwood 1993.

⁸⁹ *διαλέγεσθαι δὲ αὐτὸ ὡς περ ἀνθρώπων Ἰνδοῖσι, ἃν δὲ Ἑλληνιστὶ μάθη, καὶ Ἑλληνιστὶ* (FGH 688 F 45. 8).

guistic capabilities, just a summary of his words by Photius, and so we cannot know if he did much more than note, wide-eyed, the wonders of a talking bird with polyglot potential. Yet even the abbreviated version of the *Indica* makes it plain that Ctesias stressed that parrots speak whichever language they are taught, Indian if the parrot is taught Indian, and Greek if taught Greek. Greek—correctly pronounced, idiomatic Greek—is perhaps the defining trait of a Greek, the outstanding factor in determining Hellenic ethnicity. What are we to make of a parrot who speaks Greek? Surely we cannot think a Greek-speaking bird cultured, and an Indian-sounding parrot, barbarian. A creature who can speak perfect Greek, Indian, or any other language with equal facility, points to the fact that learning one language is much like learning another. The parrot learns the language he is taught: his native language, so to speak, is arbitrary and a reflection of his surroundings, not his origins. Could we say the same thing about acquiring Greek, as opposed to barbarian, culture?

Ctesias' parrot seems to destroy the polarity between Greek and barbarian and the distinction between animal and human in one fell swoop, for talking parrots present something of a philosophical challenge as well, forcing thinkers to define in what way the birds' speech can be distinguished from the strictly human capacity for language. We have already seen how the linguistic abilities of Ctesias' Dogheads reflect their whole manner of life. Caught between a bestial and a human way of living, they possess only half a language: the Dogheads can comprehend the Indian tongue, but are unable to speak it themselves. Parrots are, linguistically speaking, the reverse of the Dogheads, for these birds are articulate but uncomprehending creatures.

It is worth comparing here Herodotus' approach to talking birds; he writes of such creatures only to dismiss the tale (2. 55-7). After recounting the story of a speaking dove from Egypt who stated that there should be an oracle of Zeus at Dodona, Herodotus provides a rationalizing explanation: the dove was in fact a barbarian woman whose speech sounded like the twittering of a bird. Once the woman learned to speak Greek, the dove was thought to talk in a human voice. For how, Herodotus asks, could a dove speak in a human voice (*ἐπεὶ τέῳ τρόπῳ ἂν πελειὰς γε ἀνθρωπινή φωνὴ φθέγγεται*; 2. 57. 2).⁹⁰ Ctesias has no difficulty in accepting a speaking bird, not even

⁹⁰ See Lenfant 1990, esp. 209-10.

one whose language is Greek. In the *Persica*, incidentally, he is equally accepting of the idea that there are animals who can count and we hear of the numerate cows of Susa. These cows know how to count to 100 and are perfectly willing to carry 100 buckets of water to irrigate the royal gardens on a daily basis. If anyone tries to have them carry even one bucket more, the cows refuse and cannot be compelled to do so even by force, Ctesias reports (*FGH* 688 F 34a-b).

The philosophical issues raised by birds capable of making articulate sounds were discussed by Greek thinkers from Aristotle onwards, and this question continued, in fact, to disturb Western philosophers for a very long time.⁹¹ John Locke, for instance, grapples with the problems posed by a talking parrot. He discusses the view that a specific parrot, owned by Prince Maurice of Nassau, was 'rational' and could 'discourse, reason, and philosophize' with more intelligence than an ordinary, 'dull, irrational Man'.⁹² Locke himself argued that humans' ability to use sounds as signs for internal concepts distinguishes their speech from that of parrots. In this latter statement, Locke was in fact following Stoic thinkers. They stressed that parrots are incapable of real speech, because they are incapable of thought. Human utterances are both articulated and issue from thought. Humans, argue the Stoics, differ from non-rational animals not by uttered speech but by internal speech, for crows and parrots and jays utter articulate sounds.⁹³ Here we come to the distinction between spoken and internal speech, *προφορικός λόγος* and *ἐνδιάθετος λόγος*, a distinction which occupied the Stoics and later philosophers.⁹⁴ Parrots, incidentally, could be used to express externally the internal wishes and ambitions of humans. There are several ancient tales of resourceful men who trained parrots to announce that they were gods. In one version, the parrots are then recaptured and taught to recant, saying 'Apsethos shut us up and compelled us to say "Apsethos is a god."'⁹⁵

⁹¹ See Glidden 1994; Sorabji 1993, 80-6. Whitaker 1996, 45-51 has a useful survey of animal communication vs. human speech in Aristotle.

⁹² J. Locke, *Essay Concerning Human Understanding* (2. 27. 8); see Rée 1999, 110-11.

⁹³ Speech issues from thought: Diog. Laert. 7. 55 = Long and Sedley 1987, 33H; see 33A. Internal speech: Sext. Emp. *Adv. Math.* 8. 275 = Long and Sedley 1987, 53T. See Glidden 1994, esp. 132-3, and Everson 1994, 8-9.

⁹⁴ See further Labarrière 1997.

⁹⁵ Hippol. *Refut.* 6. 8; see too Max. Tyre 29. 4; Aelian, *VH* 14. 30; *Σ* Dio Chrys. Or. 1. 14. These stories are discussed by Osborne 1987, 70-2 and 232-3.

Parrots have to be taught to pronounce the names of men, while corocottas, our last exotic creatures, learn to use names by themselves. The corocottas, or hyenas, are described as a mixture of dog and wolf and are said to have extraordinary teeth. They reportedly lure humans to their death by imitating individual human voices and calling to their intended victims—variously said to be woodcutters, children, or ordinary people in their homes—by name.⁹⁶ These animals not only know how to reproduce the sounds of human language, they supposedly can imitate individual voices, sounding like those nearest and dearest to their victims. The corocottas, then, are more than mimics for they appreciate the social uses to which the sound of a friend's voice can be put. They also understand the power of names, using these familiar one-word labels to entrap individuals. The corocottas' capacity for speech is terrifying, for they use the very simple language at their disposal as a deadly weapon.

A Friendly Lion

Let us conclude with a charming tale of friendly communication across species, the story of Androcles and his friend, the lion.⁹⁷ Androcles is a runaway slave who is offered shelter by a lion, after he responds to the lion's silent request and removes a stake from his paw. The lion shares the game he hunts with his companion and the two eat together, with Androcles cooking his meat and the lion eating it raw.⁹⁸ The two, in other words, form a society of sorts. After three years, Androcles leaves the lion, is eventually captured, and then condemned to be eaten by wild beasts. The wild beast is none other than his companion the lion, who also has been captured. While the lion recognizes Androcles at once, it takes the man some time to return the animal's friendly greeting. Their unusual connection then leads to the pair being freed. In this tale, the mute lion who can only communicate by gestures is in no way inferior, either in memory or manners, to Androcles the man. The lion is an exemplary host, who has a better memory than his guest and is more

⁹⁶ See Aelian, *NA* 7. 22; Pliny, *NH* 8. 107; *FGH* 666 F 1 (Dalion); Porph. *De Abst.* 3. 4. 5. Diodorus (3. 35. 10 = Agatharchides fr. 78b) calls this tale fanciful. Some of these ancient authors call the hyena a crocottas (*κροκόττας*).

⁹⁷ See Aelian, *NA* 7. 48; compare Aul. Gell. 5. 14 and see the discussion in Osborne 1990, 18.

⁹⁸ In Gellius' version (5. 14. 25), Androcles has no fire and lets his meat dry in the sun.

successful at communicating both his needs and his goodwill. Androcles and the lion—a man who eats cooked meat and possesses speech, and an inarticulate animal who consumes raw meat—do not share a language or a diet in common, but they nonetheless manage to live in harmony for several years and communicate, as equals. The boundaries of language and culture can be respected—and yet superseded—by two companions of different species.

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